PSA PASSIVE SYSTEM ALLIANCE
WALSIN TECHNOLOGY CORPORATION

Inductor

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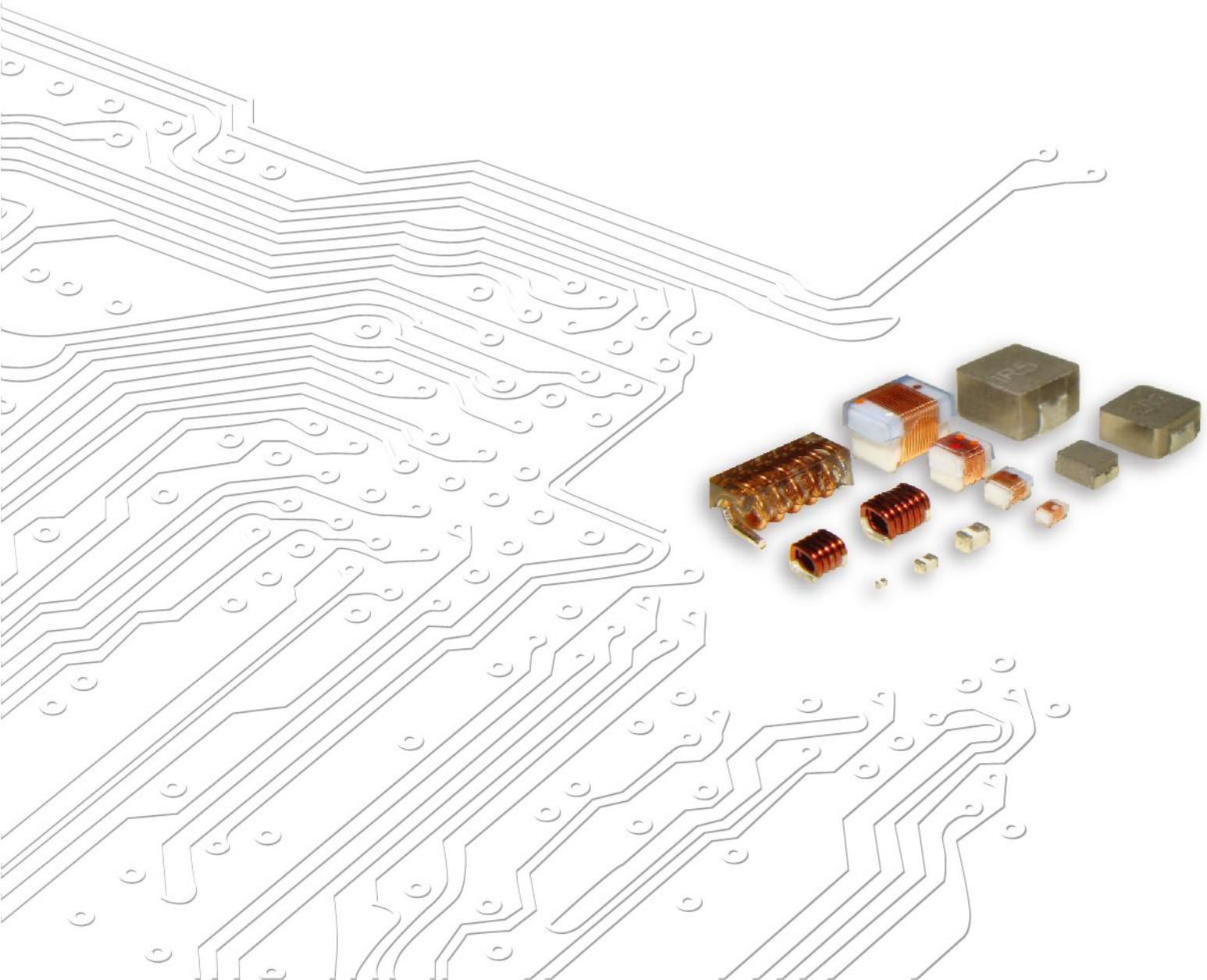
Product catalog



PSA PASSIVE SYSTEM ALLIANCE
WALSIN TECHNOLOGY CORPORATION

Product Portfolio

Multilayer Ceramic Capacitors

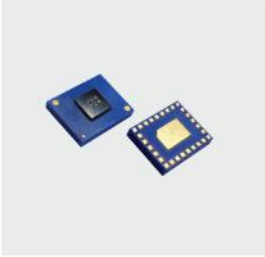
Chip Resistors

Disc Capacitors

Inductors

RF Filters

Antenna



Antenna Switch & Module

MOV Varistors

IEC-63 Nominal Resistance / Capacitance

E1	100																							
E3	100								220								470							
E6	100				150				220				330				470				680			
E12	100		120		150		180		220		270		330		390		470		560		680		820	
E24	100	110	120	130	150	160	180	200	220	240	270	300	330	360	390	430	470	510	560	620	680	750	820	910
E96	100	102	121	124	147	150	178	182	215	221	261	267	316	324	383	392	464	475	562	576	681	698	825	845
	105	107	127	130	154	158	187	191	226	232	274	280	332	340	402	412	487	499	590	604	715	732	866	887
	110	113	133	137	162	165	196	200	237	243	287	294	348	357	422	432	511	523	619	634	750	768	909	931
	115	118	140	143	169	174	205	210	249	255	301	309	365	374	442	453	536	549	649	665	787	806	953	976

E6: $\sqrt[6]{10} \fallingdotseq 1.46$ E12: $\sqrt[12]{10} \fallingdotseq 1.21$
E1 series resistance: 1Ω, 10Ω, 100Ω, 1000Ω, 10000Ω, 100000Ω

INDEX

INDEX

Quick Product Information

Application	Type	Series	Range	Size (mm)			Quantity per reel
				L	W	H	
RF Inductor	Wire Wound Ceramic Chip Inductor (AEC-Q200)	(WQ) WLCW1005	1nH ~ 120nH	1.19	0.64	0.66	4K
		WLCW1005CQ	1.3nH ~ 8.4nH	1	0.5	0.5	10K
		(WQ) WLCW1608	1.6nH ~ 470nH	1.8	1.12	1.02	4K
		WLCW1608HQ	1.8nH ~ 390nH	1.7	1.02	0.9	4K
		(WQ) WLCW2012	2.2nH ~ 4700nH	2.29	1.73	1.52	3K
		WLCW2012HQ	2.5nH ~ 51nH	2.4	1.65	1.45	3K
		(WQ) WLCW2520	8.2nH ~ 15000nH	2.92	2.79	2.02 / 2.10	2K
		WLCW2520HQ	3nH ~ 100nH	2.92	2.7	2.79	2K
		(WQ) WLCW3225	4.7nH ~ 3300nH	3.42	2.3	2.8	1.5K
		(WQ) WLCW4532	82nH ~ 1200nH	4.55	3.23	3.61	0.6K
	Thin-Film Ceramic Chip Inductor	WLTF0603	0.6nH ~ 10nH	0.6	0.3	0.28	15k
	Multi-Layer High Frequency	WLCM0603	0.3nH ~ 100nH	0.6	0.3	0.3	15K
		WLCM1005	0.3nH ~ 270nH	1.0	0.5	0.5	10K
		WQCM1608	1 nH ~ 470nH	1.6	0.8	0.8	4K
	SMD Air Wound Coil (AEC-Q200)	WLA29B	3.7nH~ 17.5nH	4.95 - 5.33	4.7 - 5.84	5.46 - 5.71	1K
		(WQ) WLAC291A	2.5nH ~ 18.5nH	3.68	3.05	3.18	0.5K
		(WQ) WLAC291B	17.5nH ~ 43nH	6.86	3.05	3.18	0.5K
		(WQ) WLAC292A	1.65nH ~ 5.4nH	2.21	1.42	1.37	2K
		(WQ) WLAC292B	5.6nH ~ 12.55nH	4.04	1.42	1.37	2K
		(WQ) WLAC293A	22nH ~ 120nH	4.83	3.81	4.2	1K
		(WQ) WLAC294A	90nH ~ 538nH	10.55	6.35	5.9	1K
	SMD Square Air Wound Coil (AEC-Q200)	(WQ) WLQC0806	5.5nH ~ 19.4nH	2.591	1.829	1.397	2K
		(WQ) WLQC0807	6.9nH ~ 22nH	2.591	1.829	1.524	2K
		(WQ) WLQC0908	8.1nH ~ 27.3nH	2.972	2.134	1.829	2K
		WLQC1111	27nH ~ 47nH	3.3	2.67	2.79	2.5K
		WLQC1515	47nH ~ 82nH	5.84	3.56	3.73	2
		WLQC2222	90nH ~ 300nH	11.94	5.72	5.69	0.75K
		WLQC2929	330nH ~ 500nH	14	7.49	7.24	0.6K

Application	Type	Series	Range	Size (mm)			Quantity per reel
				L	W	H	
Signal and Noise	Ferrite Chip Inductor	WLFI1608	0.047uH ~ 10uH	1.6	0.8	0.8	4K
		WLFI2012	0.047uH ~ 10uH	2	1.25	0.85 / 1.25	4K / 2K
	Chip Bead	WLBD0603	10Ω ~ 1000Ω	0.6	0.3	0.3	15K
		WLBD1005	10Ω~ 1000Ω	1	0.5	0.5	10K
		WLBD1608	10Ω~ 2500Ω	1.6	0.8	0.8	4K
		WLBD2012	30Ω~ 2000Ω	2	1.2	0.85	4K
		WLBD3216	31Ω~ 2000Ω	3.2	1.6	1.1	3K
		WLBD3225	60Ω~ 90Ω	3.2	2.5	1.3	2K
		WLBD4516	80Ω~ 150Ω	4.5	1.6	1.6	2K
		WLBD4532	70Ω~ 120Ω	4.5	3.2	1.5	1K
	Chip Bead High Current Type	WLBD1005HC	10Ω~ 120Ω	1	0.5	0.5	10K
		WLBD1608HC	30Ω~ 1000Ω	1.6	0.8	0.8	4K
		WLBD2012HC	31Ω~ 600Ω	2	1.25	0.85	4K
		WLBD3216HC	30Ω~ 1200Ω	3.2	1.6	1.1	3K
		WLBD3225HC	60Ω~ 1000Ω	3.2	2.5	1.3	2K
		WLBD4516HC	60Ω~ 850Ω	4.5	1.6	1.6	2K
		WLBD4532HC	80Ω~ 1300Ω	4.5	3.2	1.5	1K
	Wire Wound Ferrite Chip Inductor	WLFW1608	0.047uH ~ 10uH	1.8	1.1	1.2	4K
		WLFW2012	0.078uH ~ 27uH	2.29	1.91	1.6	3K
		WLFW2520	0.047uH ~ 22uH	2.72	2.59	1.83	2K
	Common Mode Choke (AEC-Q200)	(WQ) WTCF2012	67Ω~750Ω	2	1.2	1.2	2K
		(WQ) WTCF2012FH	67Ω~ 120Ω	2	1.2	1.2	2K
	Balun Transformer	WTBL2012	50 / 50Ω ; 75 / 75Ω	2	1.2	1.2	2K

Quick Product Information

Application	Type	Series	Range	Size (mm)			Quantity per reel
				L	W	H	
Power Inductor	Multi-Layer Power Inductor	WLFM160808	0.24uH ~ 2.2uH	1.6	0.80	0.80	4K
		WLFM201205	0.47uH ~ 2.2uH	2.0	1.25	0.50	4K
		WLFM201209	0.47uH ~ 4.7uH	2.0	1.25	0.90	3K
		WLFM201609	0.47uH ~ 4.7uH	2.0	1.60	0.90	3K
		WLFM2520	0.47uH ~ 4.7uH	2.5	2	1	3K
	SMD Shielded Wire Wound Power Inductor	WLPN202012	1uH ~ 4.7uH	2.0	2	1.2	2.5K
		WLPN242410	0.68uH ~ 22uH	2.4	2.4	1	2.5K
		WLPN242412	0.47uH ~ 10uH	2.4	2.4	1.2	2.5K
		WLPN303010	1.2uH ~ 22uH	3	3	1	2K
		WLPN303015	1uH ~ 100uH	3	3	1.5	2K
		WLPN404010	1uH ~ 22uH	4	4	1	5K
		WLPN404018	1.0uH ~ 220uH	4	4	1.8	3.5K
		WLPN505010	1uH ~ 22uH	4.9	4.9	1	1K
		WLPN505020	1uH ~ 22uH	4.9	4.9	2	0.8K
		WLPN505040	1.5uH ~ 47uH	4.9	4.9	4.1	1.5K
		WLPN606010	1.5uH ~ 22uH	6	6	1	1K
		WLPN606028	0.9uH ~ 100uH	6	6	2.8	2K
		WLPN606045	1uH ~ 150uH	6	5.9	4.5	1.5K
		WLPN808042	0.9uH ~ 100uH	8	8	4.2	1K
	SMD Assembly Shielded Wire Wound Power Inductor	WLSS214P	1.5uH ~ 12uH	3.2	3.2	1.55	1K
		WLSS316P	1.5uH ~ 33uH	3.8	3.8	1.8	1K
		WLSS428P	1.2uH ~ 180uH	4.7	4.7	3	1.5K
		WLSS528P	2.5uH ~ 100uH	5.7	5.7	3	1.5K
		WLSS628P	3uH ~ 100uH	6.7	6.7	3	1.5K
		WLSS124P	3.9uH ~ 330uH	12	12	4.8	0.75K
		WLSS125P	1.3uH ~ 1000uH	12	12	6	0.5K
		WLSS127P	1.2uH ~ 1000uH	12	12	8	0.5K
		WLSSA38G	1.5uH ~ 330uH	10.3	10.4	4	1K
		WLSSA50G	0.8uH ~ 1000uH	10.3	10.5	5.1	0.5K
	SMD Unshielded Wire Wound Power Inductor	WLSN032D	1uH ~ 470uH	3.3	3	2.1	0.5K
		WLSN043D	1uH ~ 330uH	4.3	4	3.2	2.25K
		WLSN054D	1uH ~ 270uH	5.8	5.2	4.5	1K
		WLSN073D	10uH ~ 330uH	7.8	7	3.5	1K
		WLSN075D	6.8uH ~ 4700uH	7.8	7	5	1K
		WLSN084F	1uH ~ 1500uH	12.95	9.4	5.21	0.75K
		WLSN104D	10uH ~ 1000uH	10	9	4	1.2K
		WLSN105D	10uH ~ 820uH	10	89	5.4	0.7K
	SMD Molded Power Choke	WLPH201610P	0.24uH ~ 2.2uH	2.0	1.6	1.0	3K
		WLPH201610S	0.47uH ~ 2.2uH	2.0	1.6	1.0	3K
		WLPH252010P	0.22uH ~ 4.7uH	2.5	2.0	1.0	3K
		WLPH252010S	0.33uH ~ 2.2uH	2.5	2.0	1.0	3K
		WLPH252012P	0.47uH ~ 4.7uH	2.5	2.0	1.2	3K
		WLPH252012S	0.47uH ~ 2.2uH	2.5	2.0	1.2	3K
		WLPM444220	0.1uH ~ 10uH	4.4	4.2	1.8	2K
		WLPM545230	0.2uH ~ 10uH	5.4	5.2	2.8	2K
		WLPM706630	0.15uH ~ 22uH	7	6.6	2.8	1K
		WLPMA0A040	0.22uH ~ 68uH	10.85 / 11.15	10	3.8	0.5K

Part Number Explanation and Coding Rule

WL	CM	1608	Z0	G	1N2	T	B
1	2	3	4	5	6	7	8

1. Category	Code	Description
	WL	Inductor/ Bead / RF Products
	WT	Transformer / Balun /Common Mode Choke
	WQ	Inductor (AEC-Q200)

2. Series	Code	Description
a. RF Inductor	CW	Ceramic Wire Wound Chip Inductor
	AC	SMD Air Wound Coil
	QC	SMD Square Air Wound Coil
	CM	Multi-Layer Ceramic High Frequency
	TF	Thin Film Chip Inductor
	FI	Ferrite Chip Inductor
b. Signal & Noise	BD	Chip Bead
	FW	Wire Wound Ferrite Chip Inductor
	CF	Common Mode Choke
	BL	Balun Transformer
	FM	Multilayer Power Inductor
	PM	SMD Molded Power Inductor
a. Power Inductor	PH	SMD Molded Power Inductor
	SN	SMD Unshielded Wire Wound Power Inductor
	SS	SMD Assembly Wire Wound Power Inductor
	PN	SMD Shielded Wire Wound Power Inductor

3. Dimension	Code	Description
a. Size	4532	EIA 1812
	4516	EIA 1806
	3225	EIA 1210
	3216	EIA 1206
	2012	EIA 0805
	1608	EIA 0603
	1005	EIA 0402
	0603	EIA 0201
	0402	EIA 01005
b. Others	Code	Description
	2520	2.5mm*2.0mm
	4040	4.0mm*4.0mm
	075D	7.8mm*7.0mm
	A0B0	10.0mm*11.0mm

A:10 ,B:11

4. Series extension 系列擴充碼	Code	Description
a. Series Extension	Z0 & K2	No Definition
	XX	Refer to Datasheet
b. Dimension Height (Detail in Datasheet)	18	1.8mm

5. Tolerance:	Code	Description
	B	± 0.1nH
	C	± 0.2nH
	S	± 0.3nH
	W	± 0.5nH
	G	± 2%
	H	± 3%
	J	± 5%
	K	± 10%
	M	± 20%
	N	± 30%
	U	± 25%

6. Value:	Code	Description
	1N2	1.2nH
	12N	12nH
	R12	120nH=0.12uH
	1R2	1.2uH / OHM
	120 / 12R	12uH / OHM
	121	120uH / OHM
	102	1200uH / OHM

OHM: Unit for WLBD WTCF

Series No. For WTBL

7. Packing	Code	Description
	T	7" Paper Tape
	P	7" Plastic Tape
	L	13" Plastic Tape

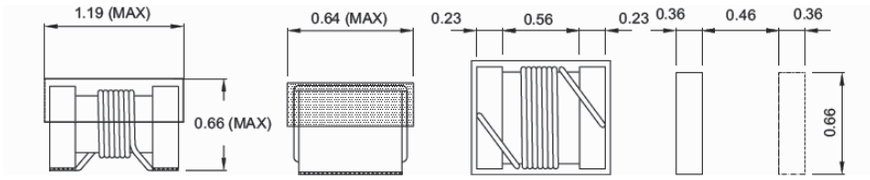
8. Spare	Code	Description
	B & P	General
	S & H	High Current

Wire Wound Ceramic Chip Inductor WLCW1005 Series

Mechanical Dimensions

(Unit: mm)

WLCW1005



Recommend Pattern

Electrical Specification

Walsin Part Number	L (nH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	900 MHz		1.7 GHz		SRF (GHz) Min	RDC Max (Ω)	Irms (mA)
					L Typ	Q Typ	L Typ	Q Typ			
WLCW1005Z0□1N0TB	1.0	J, K	16	250	1.02	75	1.02	70	12.70	0.045	1360
WLCW1005Z0□1N2TB	1.2	J, K	16	250	1.17	30	1.17	40	12.90	0.090	740
WLCW1005Z0□1N8TB	1.8	J, K	16	250	2.08	59	1.94	74	12.00	0.070	1040
WLCW1005Z0□1N9TB	1.9	J, K	16	250	1.72	65	1.74	80	11.30	0.070	1040
WLCW1005Z0□2N0TB	2.0	G, J, K	16	250	1.93	54	1.93	75	11.10	0.070	1040
WLCW1005Z0□2N2TB	2.2	G, J, K	19	250	2.19	55	2.23	82	10.80	0.070	960
WLCW1005Z0□2N4TB	2.4	G, J, K	15	250	2.24	51	2.27	70	10.50	0.068	790
WLCW1005Z0□2N7TB	2.7	G, J, K	16	250	2.58	42	2.60	61	10.40	0.120	640
WLCW1005Z0□3N3TB	3.3	G, J, K	19	250	3.10	65	3.12	80	7.00	0.066	840
WLCW1005Z0□3N6TB	3.6	G, J, K	19	250	3.56	45	3.62	71	6.80	0.066	840
WLCW1005Z0□3N9TB	3.9	G, J, K	19	250	3.89	50	4.14	72	6.00	0.066	840
WLCW1005Z0□4N1TB	4.1	G, J, K	19	250	3.89	50	4.14	72	6.00	0.066	700
WLCW1005Z0□4N3TB	4.3	G, J, K	18	250	4.19	40	4.30	71	6.00	0.091	700
WLCW1005Z0□4N7TB	4.7	G, J, K	15	250	4.78	47	4.59	62	4.70	0.130	640
WLCW1005Z0□5N1TB	5.1	G, J, K	20	250	5.16	52	5.19	76	4.80	0.083	800
WLCW1005Z0□5N6TB	5.6	G, J, K	20	250	5.20	48	5.28	75	4.80	0.083	760
WLCW1005Z0□6N2TB	6.2	G, J, K	20	250	6.15	50	6.20	73	4.80	0.083	760
WLCW1005Z0□6N8TB	6.8	G, J, K	20	250	6.73	65	6.95	70	4.80	0.083	680
WLCW1005Z0□7N3TB	7.3	G, J, K	20	250	7.51	60	7.89	80	4.80	0.260	680
WLCW1005Z0□7N5TB	7.5	G, J, K	22	250	7.91	60	8.22	85	4.80	0.100	680
WLCW1005Z0□8N2TB	8.2	G, J, K	22	250	8.53	64	8.81	88	4.40	0.100	680
WLCW1005Z0□8N7TB	8.7	G, J, K	18	250	8.78	54	9.21	73	4.10	0.200	480
WLCW1005Z0□9N0TB	9.0	G, J, K	18	250	9.07	65	9.53	83	4.16	0.100	680
WLCW1005Z0□9N1TB	9.1	G, J, K	22	250	9.27	63	8.61	73	4.16	0.100	680
WLCW1005Z0□9N5TB	9.5	G, J, K	18	250	9.64	62	9.93	56	4.00	0.200	480
WLCW1005Z0□10NTB	10	G, J, K	21	250	10.16	50	9.72	85	3.90	0.200	480
WLCW1005Z0□11NTB	11	G, J, K	24	250	10.89	53	11.46	77	3.68	0.120	640
WLCW1005Z0□12NTB	12	G, J, K	24	250	12.71	62	12.87	77	3.60	0.120	640
WLCW1005Z0□13NTB	13	G, J, K	24	250	13.4	51	14.63	57	3.45	0.210	440
WLCW1005Z0□15NTB	15	G, J, K	24	250	15.2	55	16.88	76	3.28	0.170	560
WLCW1005Z0□16NTB	16	G, J, K	24	250	16.43	45	18.79	49	3.10	0.220	560
WLCW1005Z0□18NTB	18	G, J, K	25	250	17.39	52	22.18	64	3.10	0.230	420
WLCW1005Z0□19NTB	19	G, J, K	24	250	19.51	60	21.85	72	3.04	0.200	480
WLCW1005Z0□20NTB	20	G, J, K	25	250	20.7	52	23.66	53	3.00	0.250	420
WLCW1005Z0□22NTB	22	G, J, K	25	250	22.33	57	26.54	53	2.80	0.300	400
WLCW1005Z0□23NTB	23	G, J, K	22	250	23.8	49	26.85	64	2.72	0.300	400
WLCW1005Z0□24NTB	24	G, J, K	25	250	25.59	59	31.06	56	2.70	0.300	400
WLCW1005Z0□27NTB	27	G, J, K	24	250	29.26	45	32.56	62	2.48	0.300	400
WLCW1005Z0□30NTB	30	G, J, K	25	250	31.9	45	40.38	41	2.35	0.300	400
WLCW1005Z0□33NTB	33	G, J, K	24	250	34.12	35	40.32	36	2.35	0.440	400
WLCW1005Z0□36NTB	36	G, J, K	24	250	39.5	45	48.4	53	2.32	0.440	320
WLCW1005Z0□39NTB	39	G, J, K	25	250	42.65	45	50.96	42	2.10	0.550	200
WLCW1005Z0□40NTB	40	G, J, K	24	250	39.0	44	47.41	35	2.24	0.440	320
WLCW1005Z0□43NTB	43	G, J, K	25	250	45.8	46	61.55	35	2.03	0.810	100
WLCW1005Z0□47NTB	47	G, J, K	20	250	52.85	42	-	-	2.10	0.830	150
WLCW1005Z0□51NTB	51	G, J, K	25	250	56.6	40	-	-	1.75	0.820	100

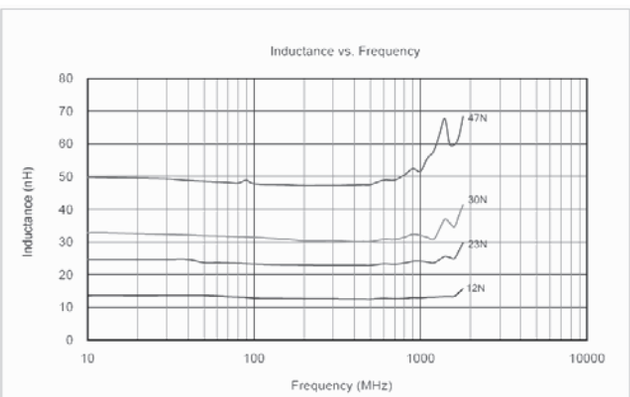
Electrical Specification (continuous)

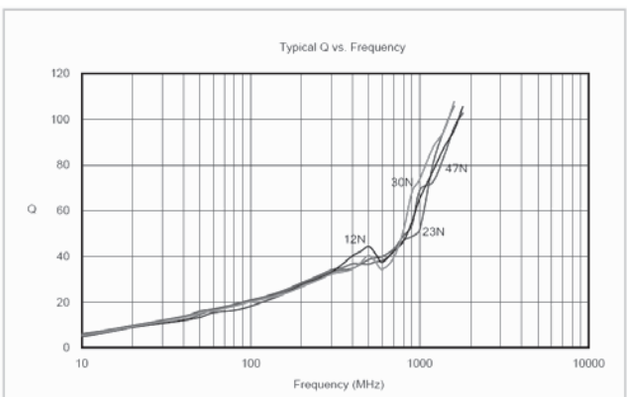
Walsin Part Number	L (nH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	900 MHz		1.7 GHz		SRF (GHz) Min	RDC Max (Ω)	Irms (mA)
					L Typ	Q Typ	L Typ	Q Typ			
WLCW1005Z0□56NTB	56	G, J, K	22	250	58.59	40	-	-	1.76	0.970	100
WLCW1005Z0□57NTB	57	G, J, K	22	250	60.15	40	-	-	1.76	0.970	100
WLCW1005Z0□62NTB	62	G, J	22	250	64.95	40	-	-	1.76	1.620	100
WLCW1005Z0□68NTB	68	G, J, K	22	250	72.17	40	-	-	1.62	1.120	100
WLCW1005Z0□75NTB	75	G, J	20	250	-	-	-	-	1.62	2.000	50
WLCW1005Z0□82NTB	82	G, J, K	20	250	-	-	-	-	1.26	1.550	50
WLCW1005Z0□91NTB	91	G, J	22	250	-	-	-	-	1.26	2.000	50
WLCW1005Z0□R10TB	100	G, J, K	20	250	-	-	-	-	1.16	2.000	30
WLCW1005Z0□R12TB	120	G, J, K	20	250					1.90	2.200	50

Tolerance: G: ± 2%, J: ± 5%

OPERATING TEMPERATURE: -40℃ ~ 125℃
Storage temperature Component: -40°C to +100°C.
Tape and reel packaging: -40°C to +80°C.
L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SRF: TESTED BY HP 8753E or HP4291B with 16193A or its equivalent
DCR: TESTED BY AGILENT 4338B or its equivalent
※MSL: LEVEL

Characteristic Curve



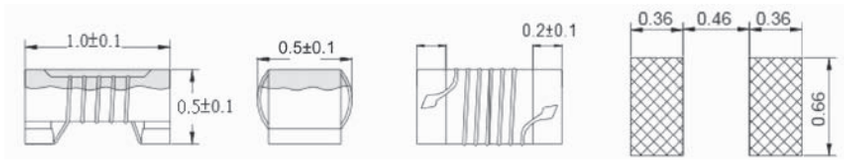


Wire Wound Ceramic Chip Inductor WLCW1005CQ Series (High Q)

Mechanical Dimensions

(Unit: mm)

WLCW1005CQ



Recommend Pattern

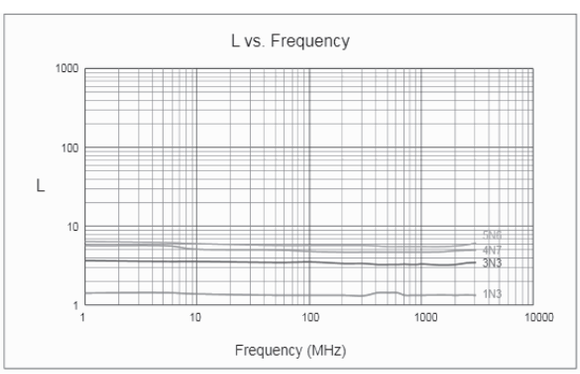
Electrical Specification

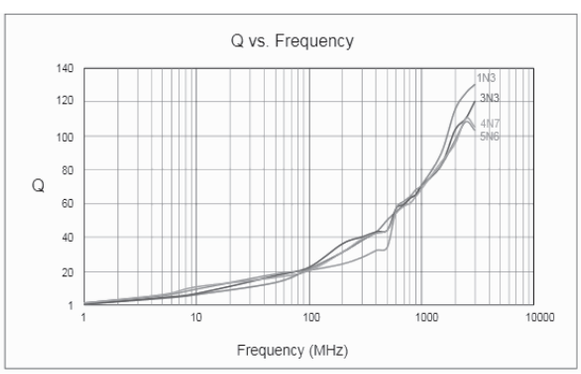
Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Rated Current (mA)
WLCW1005CQ□1N3TB	1.3	C, W	100	20	250	16	0.017	1200
WLCW1005CQ□1N4TB	1.4	C, W	100	25	250	15	0.019	1100
WLCW1005CQ□2N2TB	2.2	C, W	100	25	250	14	0.027	1000
WLCW1005CQ□2N3TB	2.3	C, W	100	25	250	14	0.027	1000
WLCW1005CQ□2N4TB	2.4	W	100	25	250	14	0.027	1000
WLCW1005CQ□3N3TB	3.3	W	100	30	250	12	0.04	900
WLCW1005CQ□3N4TB	3.4	C, W	100	30	250	12	0.04	900
WLCW1005CQ□3N5TB	3.5	C, W	100	30	250	9.5	.0.040	900
WLCW1005CQ□3N6TB	3.6	C, W	100	30	250	9.5	0.04	900
WLCW1005CQ□3N8TB	3.8	C, W	100	30	250	7	0.04	900
WLCW1005CQ□3N9TB	3.9	W	100	30	250	7	0.04	900
WLCW1005CQ□4N0TB	4	C, W	100	30	250	6.5	0.051	800
WLCW1005CQ□4N2TB	4.2	C, W	100	30	250	6.5	0.051	800
WLCW1005CQ□4N7TB	4.7	W	100	30	250	8	0.051	800
WLCW1005CQ□5N1TB	5.1	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N2TB	5.2	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N3TB	5.3	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N4TB	5.4	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N5TB	5.5	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N6TB	5.6	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N7TB	5.7	C, W	100	30	250	8	0.051	800
WLCW1005CQ□5N9TB	5.9	C, W	100	30	250	7.7	0.056	760
WLCW1005CQ□6N0TB	6	C, W	100	30	250	7.7	0.056	760
WLCW1005CQ□6N1TB	6.1	C, W	100	30	250	7.7	0.056	760
WLCW1005CQ□7N4TB	7.4	C, W	100	30	250	6.8	0.058	750
WLCW1005CQ□7N6TB	7.6	C, W	100	30	250	6.8	0.058	750
WLCW1005CQ□7N7TB	7.7	C, W	100	30	250	6.8	0.058	750
WLCW1005CQ□7N8TB	7.8	C, W	100	30	250	6.8	0.058	750
WLCW1005CQ□7N9TB	7.9	C, W	100	30	250	7.5	0.079	640
WLCW1005CQ□8N0TB	8	C, W	100	30	250	7.5	0.079	640
WLCW1005CQ□8N1TB	8.1	C, W	100	30	250	7.5	0.079	640
WLCW1005CQ□8N3TB	8.3	C, W	100	30	250	7.5	0.079	640
WLCW1005CQ□8N4TB	8.4	C, W	100	30	250	7.5	0.079	640

Tolerance: W:±0.5nH, C:±0.2nH
Operating Temperature Range: -55℃ ~ +125℃
Storage Temperature Range: -55℃ ~ +125℃

L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SR: TESTED BY HP 8753E /HP4291B with 16193A /ENA5071C or its equivalent
DCR: TESTED BY AGILENT zentech 502BC or its equivalent
※MSL: LEVEL

Characteristic Curve



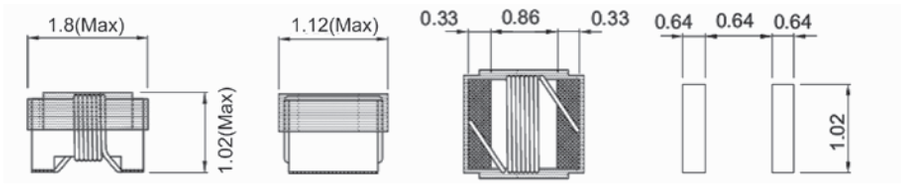


Wire Wound Ceramic Chip Inductor WLCW1608 Series

Mechanical Dimensions

(Unit: mm)

WLCW1608



Recommend Pattern

Electrical Specification

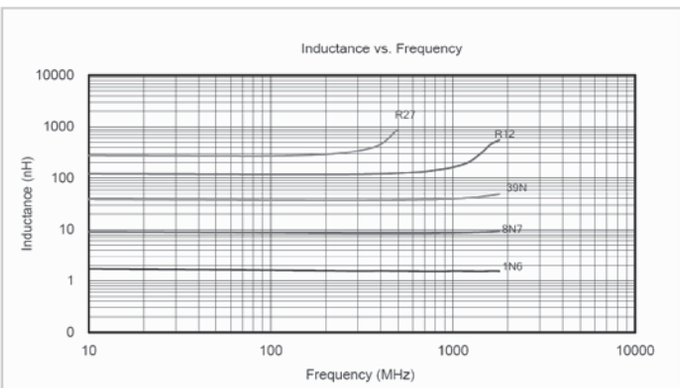
Walsin Part Number	L (nH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	SRF (GHz) Min	DCR Max (Ω)	Irms (mA)	Color Code
WLCW1608Z0□1N6PB	1.6	J, K	24	250	12.5	0.03	700	BLACK
WLCW1608Z0□1N8PB	1.8	J, K	16	250	12.5	0.045	700	BROWN
WLCW1608Z0□2N1PB	2.1	J, K	20	250	5.8	0.05	700	RED
WLCW1608Z0□2N2PB	2.2	J, K	20	250	5.8	0.10	700	ORANGE
WLCW1608Z0□3N3PB	3.3	J, K	20	250	5.5	0.07	700	VIOLET
WLCW1608Z0□3N6PB	3.6	J, K	22	250	5.9	0.063	700	RED
WLCW1608Z0□3N9PB	3.9	J, K	22	250	6.9	0.08	700	ORANGE
WLCW1608Z0□4N3PB	4.3	J, K	22	250	5.9	0.063	700	YELLOW
WLCW1608Z0□4N7PB	4.7	J, K	20	250	5.8	0.116	700	GREEN
WLCW1608Z0□5N1PB	5.1	J, K	20	250	5.7	0.14	700	BLUE
WLCW1608Z0□5N6PB	5.6	J, K	15	250	5.8	0.15	700	GRAY
WLCW1608Z0□6N1PB	6.1	J, K	25	250	5.8	0.11	700	WHITE
WLCW1608Z0□6N8PB	6.8	G, J, K	27	250	5.8	0.11	700	VIOLET
WLCW1608Z0□7N5PB	7.5	G, J, K	28	250	4.8	0.106	700	GRAY
WLCW1608Z0□8N2PB	8.2	G, J, K	25	250	5.8	0.12	700	BLACK
WLCW1608Z0□8N4PB	8.4	G, J, K	28	250	4.6	0.109	700	RED
WLCW1608Z0□8N5PB	8.5	G, J, K	28	250	4.6	0.109	700	RED
WLCW1608Z0□8N7PB	8.7	G, J	28	250	4.6	0.109	700	WHITE
WLCW1608Z0□9N5PB	9.5	G, J	28	250	5.4	0.135	700	BLACK
WLCW1608Z0□10NPB	10	G, J	31	250	4.8	0.13	700	BROWN
WLCW1608Z0□11NPB	11	G, J	33	250	4.0	0.086	700	RED
WLCW1608Z0□12NPB	12	G, J	35	250	4.0	0.13	700	ORANGE
WLCW1608Z0□14NPB	14	G, J	35	250	4.0	0.17	700	BROWN
WLCW1608Z0□15NPB	15	G, J	35	250	4.0	0.17	700	YELLOW
WLCW1608Z0□16NPB	16	G, J	34	250	3.3	0.104	700	GREEN
WLCW1608Z0□18NPB	18	G, J	35	250	3.1	0.17	700	BLUE
WLCW1608Z0□20NPB	20	G, J	40	250	3.0	0.19	700	GREEN
WLCW1608Z0□22NPB	22	G, J	38	250	3.0	0.19	700	VIOLET
WLCW1608Z0□24NPB	24	G, J	37	250	2.65	0.135	700	GRAY
WLCW1608Z0□27NPB	27	G, J	40	250	2.8	0.22	600	WHITE
WLCW1608Z0□30NPB	30	G, J	37	250	2.25	0.22	600	BLACK
WLCW1608Z0□33NPB	33	G, J	40	250	2.3	0.22	600	BROWN
WLCW1608Z0□36NPB	36	G, J	38	250	2.08	0.25	600	RED
WLCW1608Z0□39NPB	39	G, J	40	250	2.2	0.25	600	ORANGE
WLCW1608Z0□43NPB	43	G, J	39	250	2.0	0.28	600	YELLOW
WLCW1608Z0□47NPB	47	G, J	38	200	2.0	0.28	600	GREEN
WLCW1608Z0□56NPB	56	G, J	38	200	1.9	0.31	600	BLUE
WLCW1608Z0□62NPB	62	G, J	37	200	1.8	0.34	600	GRAY
WLCW1608Z0□68NPB	68	G, J	37	200	1.7	0.34	600	VIOLET
WLCW1608Z0□72NPB	72	G, J	34	150	1.7	0.49	400	GRAY
WLCW1608Z0□82NPB	82	G, J	34	150	1.7	0.54	400	WHITE
WLCW1608Z0□91NPB	91	G, J	30	150	1.7	0.50	400	BLUE
WLCW1608Z0□R10PB	100	G, J	34	150	1.4	0.58	400	BLACK
WLCW1608Z0□R11PB	110	G, J	32	150	1.35	0.61	300	BROWN
WLCW1608Z0□R12PB	120	G, J	32	150	1.3	0.65	300	RED
WLCW1608Z0□R13PB	130	G, J	30	150	1.4	0.72	300	WHITE

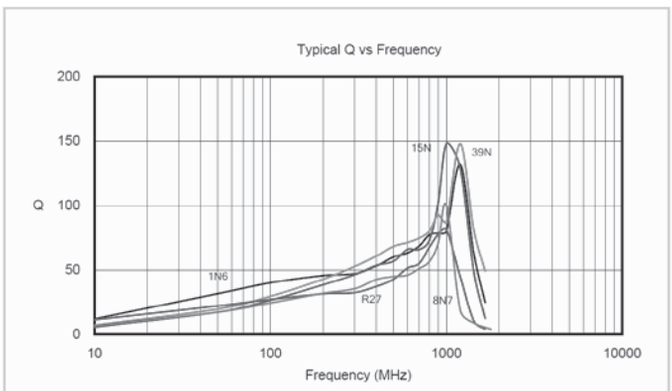
Electrical Specification (continuous)

Walsin Part Number	L (nH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	SRF (GHz) Min	DCR Max (Ω)	Irms (mA)	Color Code
WLCW1608Z0□R15PB	150	G, J	28	150	0.99	0.92	280	ORANGE
WLCW1608Z0□R18PB	180	G, J	25	100	0.99	1.25	240	YELLOW
WLCW1608Z0□R20PB	200	G, J	25	100	0.99	1.98	200	RED
WLCW1608Z0□R22PB	220	G, J	25	100	0.9	1.9	200	GREEN
WLCW1608Z0□R26PB	260	G, J	25	100	1.0	2.0	200	VIOLET
WLCW1608Z0□R27PB	270	G, J	24	100	0.9	2.3	170	BLUE
WLCW1608Z0□R33PB	330	G, J	24	100	0.9	3.9	185	VIOLET
WLCW1608Z0□R39PB	390	G, J	25	100	0.9	4.35	100	GRAY
WLCW1608Z0□R43PB	430	G, J	25	100	0.8	4.5	100	GREEN
WLCW1608Z0□R47PB	470	G, J	25	100	0.6	3.6	80	WHITE

Tolerance: K: ±10%, J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃ ~ 125℃
MSL: Level 1
TEST INSTRUMENT:
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E / 5071C
DCR TEST BY ZENTECH 502BC

Characteristic Curve



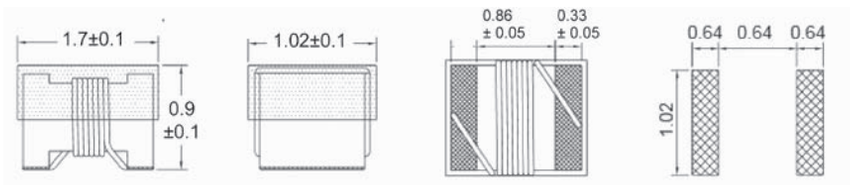


Wire Wound Ceramic Chip Inductor WLCW1608HQ Series (High Q)

Mechanical Dimensions

(Unit: mm)

WLCW1608HQ



Recommend Pattern

Electrical Specification

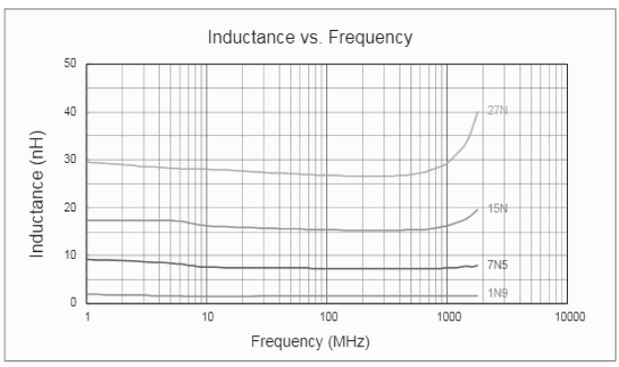
Part Number	Inductance (nH)	Inductance Tolerance	Q Min	Inductance Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Rated Current (mA)	Color Code
WLCW1608HQ□1N8PB	1.8	J	23	250	16	0.033	2100	BLACK
WLCW1608HQ□2N2PB	2.2	J	13	250	15	0.18	900	YELLOW
WLCW1608HQ□3N3PB	3.3	J	32	250	9.6	0.024	1900	BLUE
WLCW1608HQ□3N6PB	3.6	G, J	40	250	9.7	0.031	1900	RED
WLCW1608HQ□3N9PB	3.9	G, J	35	250	7.5	0.039	1600	BROWN
WLCW1608HQ□4N3PB	4.3	G, J	30	250	7.5	0.08	1300	ORANGE
WLCW1608HQ□4N7PB	4.7	G, J	26	250	7.9	0.1	1100	VIOLET
WLCW1608HQ□5N1PB	5.1	G, J	40	250	8.9	0.036	1700	GREEN
WLCW1608HQ□5N6PB	5.6	G, J	48	250	6.6	0.036	1700	BLACK
WLCW1608HQ□6N0PB	6	G, J	49	250	6	0.036	1700	WHITE
WLCW1608HQ□6N8PB	6.8	G, J	42	250	5.8	0.042	1400	RED
WLCW1608HQ□7N2PB	7.2	G, J	48	250	5.4	0.052	1400	WHITE
WLCW1608HQ□7N5PB	7.5	G, J	41	250	5.3	0.08	1300	BROWN
WLCW1608HQ□8N2PB	8.2	G, J	46	250	5.9	0.054	1400	ORANGE
WLCW1608HQ□8N7PB	8.7	G, J	46	250	5.5	0.054	1400	YELLOW
WLCW1608HQ□9N1PB	9.1	G, J	40	250	5.1	0.037	1400	BLACK
WLCW1608HQ□9N5PB	9.5	G, J	49	250	4.9	0.053	1400	BLUE
WLCW1608HQ□10NPB	10	G, J	49	250	4.3	0.048	1400	ORANGE
WLCW1608HQ□11NPB	11	G, J	41	250	4.1	0.042	1400	GRAY
WLCW1608HQ□12NPB	12	G, J	37	250	4.1	0.088	1100	YELLOW
WLCW1608HQ□15NPB	15	G, J	48	250	3.6	0.078	1200	GREEN
WLCW1608HQ□16NPB	16	G, J	45	250	3.5	0.085	1100	WHITE
WLCW1608HQ□18NPB	18	G, J	41	250	3.3	0.066	1200	BLUE
WLCW1608HQ□22NPB	22	G, J	44	250	3.15	0.14	850	VIOLET
WLCW1608HQ□23NPB	23	G, J	40	250	3	0.15	850	ORANGE
WLCW1608HQ□24NPB	24	G, J	42	250	2.95	0.074	1100	BLACK
WLCW1608HQ□27NPB	27	G, J	44	250	2.8	0.15	780	GRAY
WLCW1608HQ□30NPB	30	G, J	49	250	2.8	0.13	920	BROWN
WLCW1608HQ□33NPB	33	G, J	45	250	2.7	0.17	680	WHITE
WLCW1608HQ□36NPB	36	G, J	44	250	2.5	0.225	720	RED
WLCW1608HQ□39NPB	39	G, J	48	250	2.45	0.19	680	BLACK
WLCW1608HQ□43NPB	43	G, J	45	250	2.45	0.17	810	ORANGE
WLCW1608HQ□47NPB	47	G, J	47	200	2.3	0.24	680	BROWN
WLCW1608HQ□51NPB	51	G, J	49	200	2.3	0.28	660	BLUE
WLCW1608HQ□56NPB	56	G, J	50	200	2.2	0.3	610	RED
WLCW1608HQ□68NPB	68	G, J	46	200	2	0.33	600	ORANGE
WLCW1608HQ□72NPB	72	G, J	46	150	1.9	0.42	550	YELLOW
WLCW1608HQ□75NPB	75	G, J	46	150	1.9	0.52	500	VIOLET
WLCW1608HQ□82NPB	82	G, J	45	150	1.8	0.46	510	GREEN
WLCW1608HQ□91NPB	91	G, J	45	150	1.65	0.58	440	WHITE
WLCW1608HQ□R10PB	100	G, J	49	150	1.7	0.54	470	BLUE
WLCW1608HQ□R11PB	110	G, J	47	150	1.6	0.58	440	VIOLET
WLCW1608HQ□R12PB	120	G, J	47	150	1.55	0.72	420	GRAY
WLCW1608HQ□R15PB	150	G, J	47	150	1.35	0.82	390	WHITE
WLCW1608HQ□R18PB	180	G, J	48	100	1.3	1.5	310	BLACK
WLCW1608HQ□R20PB	200	G, J	47	100	1.25	2	280	GREEN

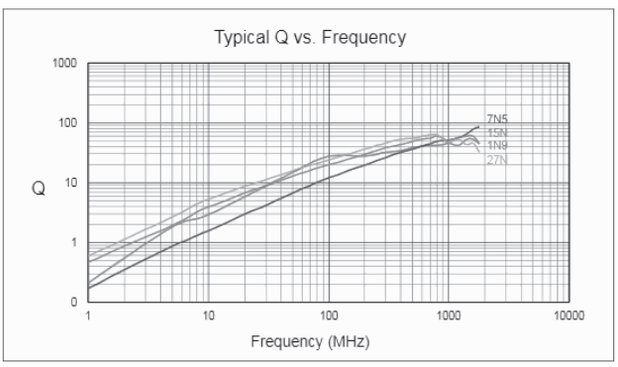
Electrical Specification (continuous)

Part Number	Inductance (nH)	Inductance Tolerance	Q Min	Inductance Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Rated Current (mA)	Color Code
WLCW1608HQ□R21PB	210	G, J	48	100	1.2	2	280	GRAY
WLCW1608HQ□R22PB	220	G, J	47	100	1.1	2	280	BROWN
WLCW1608HQ□R25PB	250	G, J	45	100	1.05	3	240	VIOLET
WLCW1608HQ□R27PB	270	G, J	46	100	1.05	2.25	260	RED
WLCW1608HQ□R30PB	300	G, J	47	100	0.99	2.8	220	GREEN
WLCW1608HQ□R33PB	330	G, J	46	100	0.93	3.6	180	BLUE
WLCW1608HQ□R39PB	360	G, J	47	100	0.93	4	170	GRAY
WLCW1608HQ□R39PB	390	G, J	47	100	0.88	4	170	YELLOW

※Tolerance: J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃ ~ 125℃
※MSL: LEVEL 1
TEST INSTRUMENT:
L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SRF: TESTED BY HP 8753E or HP4291B with 16193A or its equivalent
DCR: TESTED BY AGILENT 4338B or its equivalent

Characteristic Curve



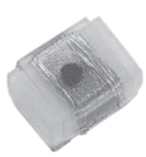


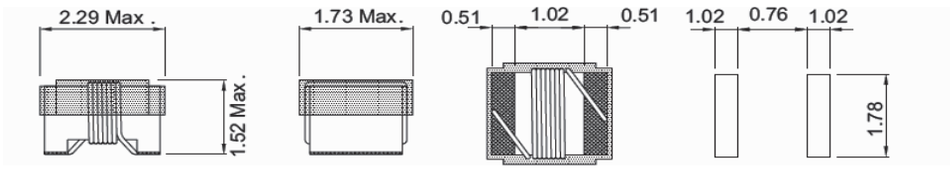
Wire Wound Ceramic Chip Inductor WLCW2012 Series

Mechanical Dimensions

(Unit: mm)

WLCW2012





Recommend Pattern

Electrical Specification

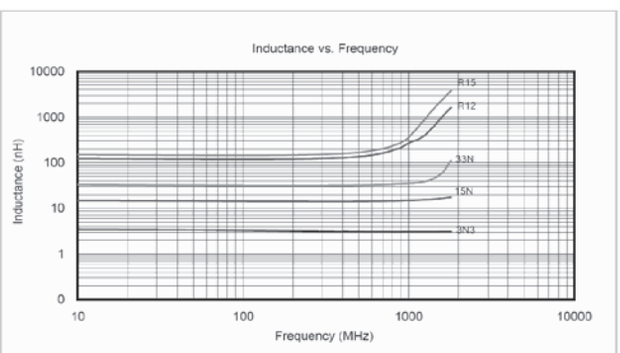
Walsin Part Number	L (nH)	Tolerance	Measuring Frequency (MHz)	Q (Min)	Test Freq (MHz)	SRF (GHz) Min	RDC Max (Ω)	Irms (mA)	Color Code
WLCW2012Z0□2N2PB	2.2	J, K	250	35	1500	3.00	0.08	600	WHITE
WLCW2012Z0□2N7PB	2.7	J, K	250	80	1500	7.90	0.03	600	BROWN
WLCW2012Z0□2N8PB	2.8	J, K	250	80	1000	7.90	0.06	800	RED
WLCW2012Z0□2N9PB	2.9	J, K	250	50	1000	4.70	0.05	600	BLUE
WLCW2012Z0□3N0PB	3.0	J, K	250	65	1500	7.90	0.06	800	VIOLET
WLCW2012Z0□3N3PB	3.3	J, K	250	35	1500	7.90	0.08	600	BLACK
WLCW2012Z0□5N6PB	5.6	J, K	250	65	1000	5.50	0.08	600	VIOLET
WLCW2012Z0□6N2PB	6.2	J, K	250	50	1000	5.50	0.11	600	GREEN
WLCW2012Z0□6N8PB	6.8	J, K	250	50	1000	5.50	0.11	600	BROWN
WLCW2012Z0□7N5PB	7.5	J, K	250	50	1000	5.50	0.10	600	BLACK
WLCW2012Z0□8N2PB	8.2	G, J, K	250	50	1000	4.70	0.12	600	RED
WLCW2012Z0□10NPB	10	G, J, K	250	60	500	4.20	0.10	600	RED
WLCW2012Z0□11NPB	11	G, J, K	700	45	500	3.00	0.15	600	ORANGE
WLCW2012Z0□12NPB	12	G, J, K	250	50	500	4.00	0.15	600	ORANGE
WLCW2012Z0□15NPB	15	G, J, K	250	50	500	3.40	0.17	600	YELLOW
WLCW2012Z0□18NPB	18	G, J, K	250	50	500	3.30	0.20	600	GREEN
WLCW2012Z0□22NPB	22	G, J, K	250	55	500	2.60	0.22	500	BLUE
WLCW2012Z0□24NPB	24	G, J, K	250	50	500	2.00	0.22	500	RED
WLCW2012Z0□27NPB	27	G, J, K	250	55	500	2.50	0.25	500	VIOLET
WLCW2012Z0□33NPB	33	G, J, K	250	60	500	2.05	0.27	500	GRAY
WLCW2012Z0□36NPB	36	G, J, K	250	55	500	1.70	0.27	500	YELLOW
WLCW2012Z0□37NPB	37	G, J, K	350	40	500	1.80	0.27	500	GREEN
WLCW2012Z0□38NPB	38	G, J, K	350	40	500	1.80	0.27	500	BLUE
WLCW2012Z0□39NPB	39	G, J, K	250	60	500	2.00	0.29	500	WHITE
WLCW2012Z0□43NPB	43	G, J, K	200	60	500	1.65	0.34	500	YELLOW
WLCW2012Z0□47NPB	47	G, J, K	200	60	500	1.65	0.31	500	BLACK
WLCW2012Z0□56NPB	56	G, J, K	200	60	500	1.55	0.34	500	BROWN
WLCW2012Z0□68NPB	68	G, J, K	200	60	500	1.45	0.38	500	RED
WLCW2012Z0□72NPB	72	G, J, K	150	65	500	1.40	0.4	500	GREEN
WLCW2012Z0□82NPB	82	G, J, K	150	65	500	1.30	0.42	400	ORANGE
WLCW2012Z0□91NPB	91	G, J, K	150	65	500	1.20	0.48	400	BLUE
WLCW2012Z0□R10PB	100	G, J, K	150	65	500	1.20	0.46	400	YELLOW
WLCW2012Z0□R11PB	110	G, J, K	150	50	500	1.00	0.48	400	VIOLET
WLCW2012Z0□R12PB	120	G, J, K	150	50	250	1.10	0.51	400	GREEN
WLCW2012Z0□R15PB	150	G, J, K	100	50	250	0.920	0.56	400	BLUE
WLCW2012Z0□R18PB	180	G, J, K	100	50	250	0.870	0.64	400	VIOLET
WLCW2012Z0□R20PB	200	G, J, K	100	50	250	0.860	0.66	400	ORANGE
WLCW2012Z0□R22PB	220	G, J, K	100	50	250	0.850	0.70	400	GRAY
WLCW2012Z0□R24PB	240	G, J, K	100	44	250	0.690	1.00	350	BLACK
WLCW2012Z0□R25PB	250	G, J, K	100	50	250	0.680	1.00	350	GREEN
WLCW2012Z0□R27PB	270	G, J, K	100	48	250	0.650	1.15	300	WHITE
WLCW2012Z0□R30PB	300	G, J, K	100	48	250	0.620	1.20	300	GRAY
WLCW2012Z0□R33PB	330	G, J, K	100	48	250	0.600	1.40	300	BLACK
WLCW2012Z0□R36PB	360	G, J, K	100	35	250	0.400	0.90	300	ORANGE
WLCW2012Z0□R39PB	390	G, J, K	150	48	250	0.560	1.50	300	BROWN
WLCW2012Z0□R43PB	430	G, J, K	100	33	100	0.430	1.70	190	WHITE

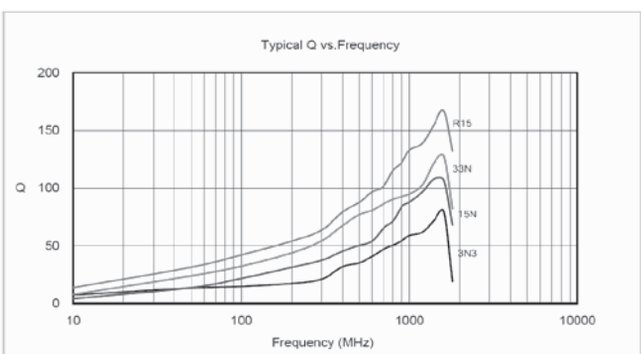
Electrical Specification (continuous)

Part Number	L (nH)	Tolerance	Measuring Frequency (MHz)	Q (Min)	Test Freq (MHz)	SRF (GHz) Min	RDC Max (Ω)	Irms (mA)	Color Code
WLCW2012Z0□R47PB	470	G, J, K	50	33	100	0.380	1.70	250	VIOLET
WLCW2012Z0□R56PB	560	J, K	25	23	50	0.340	1.90	230	ORANGE
WLCW2012Z0□R60PB	600	J, K	25	23	50	0.260	1.60	450	WHITE
WLCW2012Z0□R62PB	620	J, K	25	23	50	0.200	2.00	190	ORANGE
WLCW2012Z0□R68PB	680	J, K	25	23	50	0.188	2.20	190	GREEN
WLCW2012Z0□R75PB	750	J, K	25	23	50	0.200	2.30	180	BLUE
WLCW2012Z0□R82PB	820	J, K	25	23	50	0.215	2.50	190	BROWN
WLCW2012Z0□R91PB	910	J, K	25	24	50	0.250	2.30	170	RED
WLCW2012Z0□1R0PB	1000	G, J	25	23	50	0.100	2.90	170	BLACK
WLCW2012Z0□1R2PB	1200	G, J	7.9	18	25	0.100	2.50	170	WHITE
WLCW2012Z0□1R5PB	1500	G, J	7.9	16	25	0.100	2.50	170	BLACK
WLCW2012Z0□1R8PB	1800	G, J	7.9	16	7.9	0.080	2.50	170	BROWN
WLCW2012Z0□2R2PB	2200	G, J	7.9	16	7.9	0.060	2.70	160	RED
WLCW2012Z0□2R7PB	2700	G, J	7.9	16	7.9	0.050	3.10	150	ORANGE
WLCW2012Z0□3R3PB	3300	G, J	7.9	15	7.9	0.040	4.40	90	BLUE
WLCW2012Z0□4R7PB	4700	G, J	7.9	15	7.9	0.040	6.40	90	GREEN

Tolerance: K: ±10%, J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃ ~ 125℃
Storage temperature Component: -40°C to +100°C.
Tape and reel packaging: -40°C to +80°C
※MSL: LEVEL 1
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E
DCR TEST BY ZENTECH 502BC

Characteristic Curve



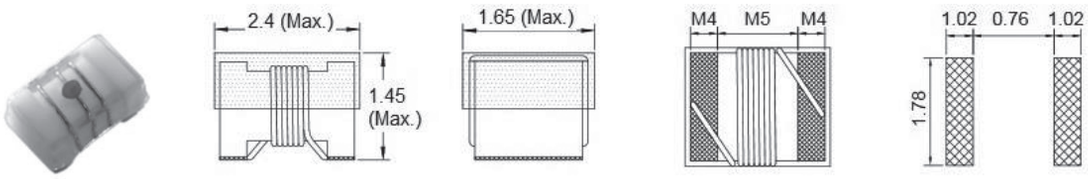


Wire Wound Ceramic Chip Inductor WLCW2012HQ Series (High Q)

Mechanical Dimensions

(Unit: mm)

WLCW2012HQ



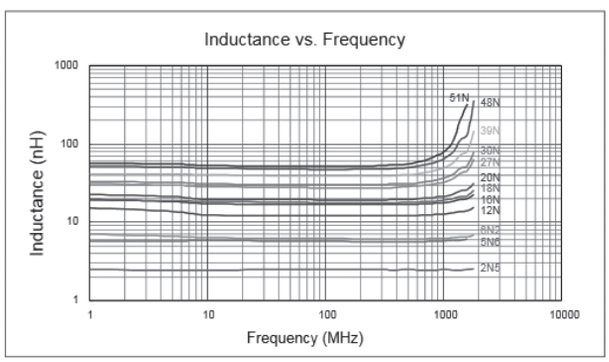
Recommend Pattern

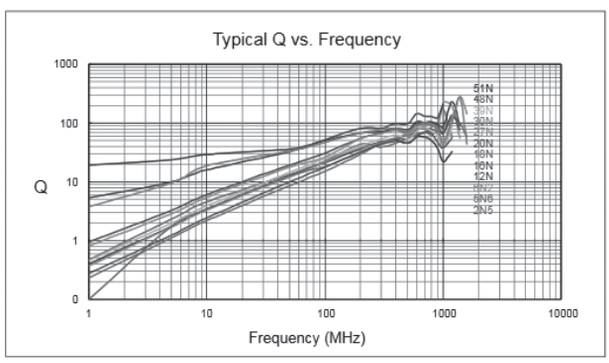
Electrical Specification

Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Q Min	Q Test Frequency (MHz)	SRF (GHz) Min.	DCR (mΩ) Max.	Rated Current (mA)	Color Code
WLCW2012HQ□2N5PB	2.5	J	250	80	1500	10.3	20	160	Black
WLCW2012HQ□5N6PB	5.6	J	250	98	1500	6.1	35	160	Brown
WLCW2012HQ□6N2PB	6.2	J	250	88	1000	4.75	35	160	Red
WLCW2012HQ□12NPB	12	G, J	250	80	1000	3	45	160	Orange
WLCW2012HQ□16NPB	16	G, J	250	72	500	2.95	60	150	Yellow
WLCW2012HQ□18NPB	18	G, J	250	75	500	2.55	60	140	Green
WLCW2012HQ□20NPB	20	G, J	250	70	500	2.05	55	140	Blue
WLCW2012HQ□27NPB	27	G, J	250	75	500	2	70	130	Violet
WLCW2012HQ□30NPB	30	G, J	250	65	500	1.95	95	120	Gray
WLCW2012HQ□39NPB	39	G, J	250	65	500	1.6	110	110	White
WLCW2012HQ□48NPB	48	G, J	200	65	500	1.4	95	120	Black
WLCW2012HQ□51NPB	51	G, J	200	65	500	1.4	120	100	Brown

Tolerance: J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃~125℃
※MSL: LEVEL 1
L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SRF: TESTED BY HP 8753E or HP4291B with 16193A or its equivalent
DCR: TESTED BY AGILENT 4338B or its equivalent

Characteristic Curve



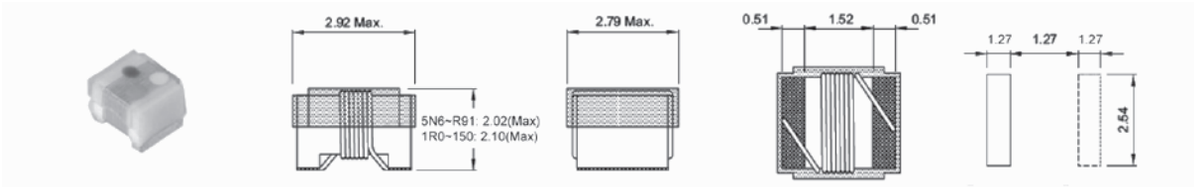


Wire Wound Ceramic Chip Inductor WLCW2520 Series

Mechanical Dimensions

(Unit: mm)

WLCW2520



Recommend Pattern

Electrical Specification

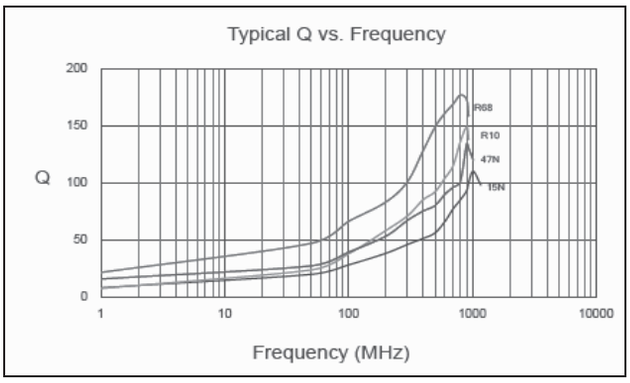
Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	COLOR CODE		
									1st	2nd	multiplier
WLCW2520Z0□8N2PB	8.2	J	50	50	500	4.10	0.08	1000	GRAY	RED	BLACK
WLCW2520Z0□10NPB	10	J	50	50	500	4.10	0.08	1000	BROWN	BLACK	BLACK
WLCW2520Z0□12NPB	12	J	50	50	500	3.30	0.09	1000	BROWN	RED	BLACK
WLCW2520Z0□15NPB	15	J	50	50	500	2.50	0.10	1000	BROWN	GREEN	BLACK
WLCW2520Z0□18NPB	18	G, J	50	50	350	2.50	0.11	1000	BROWN	GRAY	BLACK
WLCW2520Z0□22NPB	22	G, J	50	55	350	2.40	0.12	1000	RED	RED	BLACK
WLCW2520Z0□24NPB	24	G, J	50	55	350	1.90	0.13	1000	RED	YELLOW	BLACK
WLCW2520Z0□27NPB	27	G, J	50	55	350	1.60	0.13	1000	RED	VIOLET	BLACK
WLCW2520Z0□33NPB	33	G, J	50	60	350	1.60	0.14	1000	ORANGE	ORANGE	BLACK
WLCW2520Z0□36NPB	36	G, J, K	50	60	350	1.60	0.15	1000	ORANGE	BLUE	BLACK
WLCW2520Z0□39NPB	39	G, J	50	60	350	1.50	0.15	1000	ORANGE	WHITE	BLACK
WLCW2520Z0□47NPB	47	G, J	50	65	350	1.50	0.16	1000	YELLOW	VIOLET	BLACK
WLCW2520Z0□56NPB	56	G, J	50	65	350	1.30	0.18	1000	GREEN	BLUE	BLACK
WLCW2520Z0□68NPB	68	G, J	50	65	350	1.30	0.20	1000	BLUE	GRAY	BLACK
WLCW2520Z0□82NPB	82	G, J	50	60	350	1.00	0.22	1000	GRAY	RED	BLACK
WLCW2520Z0□R10PB	100	G, J	25	60	350	1.00	0.56	650	BROWN	BLACK	BROWN
WLCW2520Z0□R12PB	120	G, J	25	60	350	0.950	0.63	650	BROWN	RED	BROWN
WLCW2520Z0□R15PB	150	G, J	25	45	100	0.850	0.70	580	BROWN	GREEN	BROWN
WLCW2520Z0□R18PB	180	G, J	25	45	100	0.750	0.77	620	BROWN	GRAY	BROWN
WLCW2520Z0□R20PB	200	G, J	25	50	100	0.750	0.81	500	RED	BLACK	BROWN
WLCW2520Z0□R22PB	220	G, J	25	45	100	0.700	0.84	500	RED	RED	BROWN
WLCW2520Z0□R24PB	240	G, J	25	50	100	0.650	0.84	500	RED	YELLOW	BROWN
WLCW2520Z0□R27PB	270	G, J	25	45	100	0.600	0.91	500	RED	VIOLET	BROWN
WLCW2520Z0□R30PB	300	G, J	25	45	100	0.590	1.00	660	ORANGE	BLACK	BROWN
WLCW2520Z0□R33PB	330	G, J	25	45	100	0.570	1.05	450	ORANGE	ORANGE	BROWN
WLCW2520Z0□R36PB	360	G, J	25	45	100	0.530	1.05	660	ORANGE	BLUE	BROWN
WLCW2520Z0□R39PB	390	G, J	25	45	100	0.500	1.12	470	ORANGE	WHITE	BROWN
WLCW2520Z0□R43PB	430	G, J	25	45	100	0.480	1.15	600	YELLOW	ORANGE	BROWN
WLCW2520Z0□R47PB	470	G, J	25	45	100	0.450	1.19	470	YELLOW	VIOLET	BROWN
WLCW2520Z0□R56PB	560	G, J	25	45	100	0.415	1.33	400	GREEN	BLUE	BROWN
WLCW2520Z0□R62PB	620	G, J	25	45	100	0.375	1.40	300	BLUE	RED	BROWN
WLCW2520Z0□R68PB	680	G, J	25	45	100	0.375	1.47	400	BLUE	GRAY	BROWN
WLCW2520Z0□R75PB	750	G, J	25	45	100	0.360	1.54	360	VIOLET	GREEN	BROWN
WLCW2520Z0□R82PB	820	G, J	25	45	100	0.350	1.61	400	GRAY	RED	BROWN
WLCW2520Z0□R91PB	910	G, J	25	35	50	0.320	1.68	380	WHITE	BROWN	BROWN
WLCW2520Z0□1R0PB	1000	G, J	25	35	50	0.290	1.75	370	BROWN	BLACK	RED
WLCW2520Z0□1R2PB	1200	G, J	7.9	35	50	0.250	2.00	310	BROWN	RED	RED
WLCW2520Z0□1R5PB	1500	G, J	7.9	28	50	0.200	2.30	330	BROWN	GREEN	RED
WLCW2520Z0□1R8PB	1800	G, J	7.9	28	50	0.160	2.60	300	BROWN	GRAY	RED
WLCW2520Z0□2R0PB	2000	G, J	7.9	25	50	0.160	2.80	280	RED	BLACK	RED
WLCW2520Z0□2R2PB	2200	G, J	7.9	28	50	0.160	2.80	280	RED	RED	RED
WLCW2520Z0□2R7PB	2700	G, J	7.9	22	25	0.140	3.20	290	RED	VIOLET	RED
WLCW2520Z0□3R3PB	3300	G, J	7.9	22	25	0.110	3.40	290	ORANGE	ORANGE	RED
WLCW2520Z0□3R9PB	3900	G, J	7.9	20	25	0.100	3.60	260	ORANGE	WHITE	RED
WLCW2520Z0□4R7PB	4700	G, J	7.9	20	25	0.090	4.00	260	YELLOW	VIOLET	RED
WLCW2520Z0□5R6PB	5600	J	7.9	16	7.96	0.020	4.00	240	Green	Blue	Red

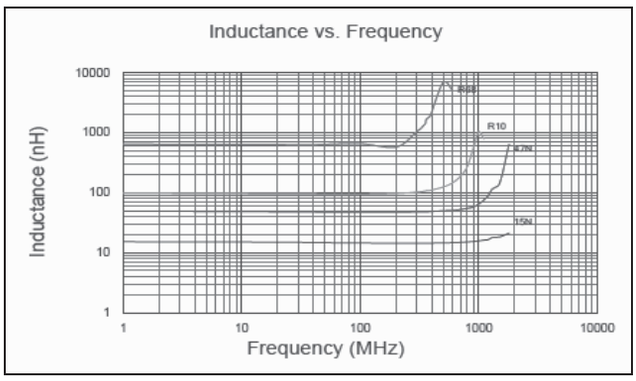
Electrical Specification (continuous)

Part Number	Inductance (nH)	Inductance Tolerance	Test Freq. (MHz)	Q Min.	Test Freq. (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Irms (mA)	COLOR CODE		
									1st	2nd	multiplier
WLCW2520Z0□8R2PB	8200	G, J	7.9	15	7.96	0.025	6.00	170	Gary	Red	Red
WLCW2520Z0□100PB	10000	J	2.52	15	7.96	0.020	9.00	150	Brown	Black	Orange
WLCW2520Z0□120PB	12000	J	2.52	15	7.96	0.018	10.50	130	Brown	Red	Orange
WLCW2520Z0□150PB	15000	J	2.52	15	7.96	0.015	11.50	120	Brown	Green	Orange

Tolerance: K: ±10%, J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃ ~ 125℃
※MSL: LEVEL 1
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E
DCR TEST BY ZENTECH 502BC

Characteristic Curve



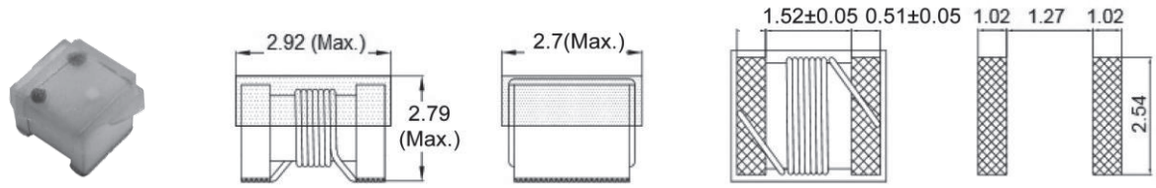


Wire Wound Ceramic Chip Inductor WLCW2520HQ Series (High Q)

Mechanical Dimensions

(Unit: mm)

WLCW2520HQ



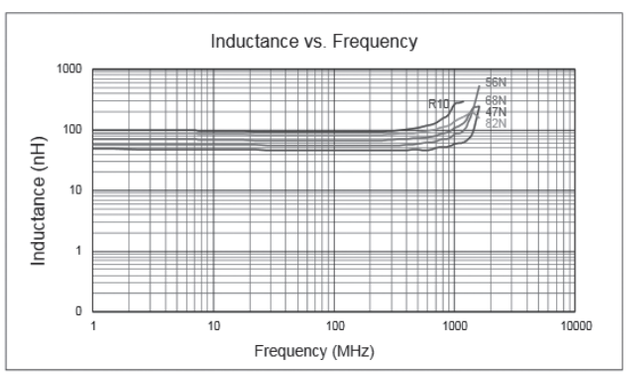
Recommend Pattern

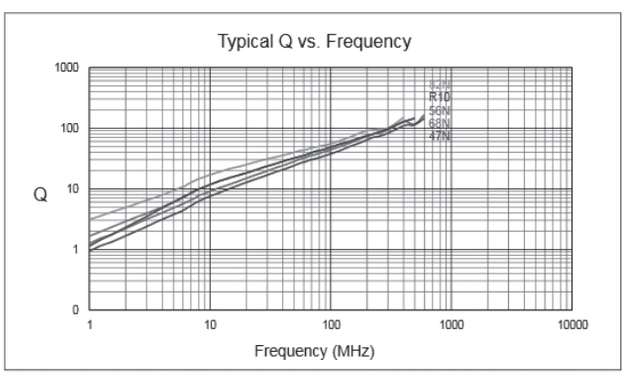
Electrical Specification

Part Number	Inductance (nH)	Inductance Tolerance	Inductance Test Frequency (MHz)	Q Min	Q Test Frequency (MHz)	SRF (GHz) Min.	DCR (Ω) Max.	Rated Current (mA)	Color Code		
									1st	2nd	multiplier
WLCW2520HQ□3N0PB	3	J	50	70	1500	8.1	0.04	160	ORANGE	BLACK	BLACK
WLCW2520HQ□4N1PB	4.1	J	50	75	1500	6.2	0.05	160	YELLOW	BROWN	BLACK
WLCW2520HQ□7N8PB	7.8	J	50	75	500	3.8	0.05	160	VIOLET	GRAY	BLACK
WLCW2520HQ□10NPB	10	J, G	50	60	500	3.6	0.06	160	BROWN	BLACK	BROWN
WLCW2520HQ□12NPB	12	J, G	50	70	500	2.8	0.06	150	BROWN	RED	BROWN
WLCW2520HQ□18NPB	18	J, G	50	62	350	2.7	0.07	140	BROWN	GRAY	BROWN
WLCW2520HQ□22NPB	22	J, G	50	62	350	2.05	0.07	140	RED	RED	BROWN
WLCW2520HQ□33NPB	33	J, G	50	75	350	1.7	0.09	130	ORANGE	ORANGE	BROWN
WLCW2520HQ□36NPB	36	J, G	50	65	350	1.4	0.09	130	ORANGE	BLUE	BROWN
WLCW2520HQ□39NPB	39	J, G	50	75	350	1.3	0.09	130	ORANGE	WHITE	BROWN
WLCW2520HQ□47NPB	47	J, G	50	75	350	1.45	0.12	120	YELLOW	VIOLET	BROWN
WLCW2520HQ□56NPB	56	J, G	50	75	350	1.23	0.12	120	GREEN	BLUE	BROWN
WLCW2520HQ□68NPB	68	J, G	50	80	350	1.15	0.13	110	BROWN	GRAY	BROWN
WLCW2520HQ□82NPB	82	J, G	50	80	350	1.06	0.16	110	GRAY	RED	BROWN
WLCW2520HQ□R10PB	100	J, G	25	62	350	0.82	0.16	100	BROWN	BLACK	RED

Tolerance: J: ±5%, G: ±2%
OPERATING TEMPERATURE: -40℃ ~ 125℃
※MSL: LEVEL 1
L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SRF: TESTED BY HP 8753E or HP4291B with 16193A or its equivalent
DCR: TESTED BY AGILENT 4338B or its equivalent

Characteristic Curve



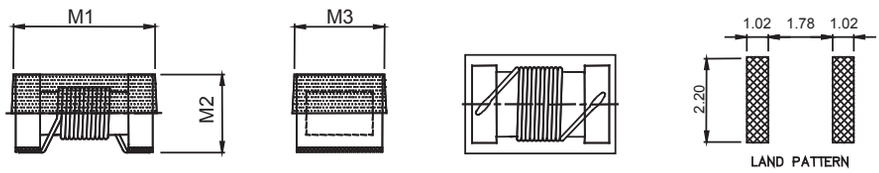


Wire Wound Ceramic Chip Inductor WLCW3225 Series

Mechanical Dimensions

(Unit: mm)

WLCW3225



Electrical Specification

Part Number	L (nH)	Tolerance	Measuring Frequency (MHz)	Q (Min)	Test Freq (MHz)	SRF (GHz) Min	DCR Max (Ω)	Irms (mA)	Color Code		
									1st	2nd	multiplier
WLCW3225Z0□4N7PB	4.7	K , J	100	50	1000	6000	0.06	600	Yellow	Violet	Black
WLCW3225Z0□5N6PB	5.6	K , J	100	50	1000	5500	0.08	600	Green	Blue	Black
WLCW3225Z0□10NPB	10	K , J , G	100	60	500	4000	0.06	600	Brown	Black	Brown
WLCW3225Z0□12NPB	12	K , J , G	100	60	500	3400	0.06	600	Brown	Red	Brown
WLCW3225Z0□15NPB	15	K , J , G	100	60	500	3200	0.06	600	Brown	Green	Brown
WLCW3225Z0□18NPB	18	K , J , G	100	60	300	2800	0.06	600	Brown	Gray	Brown
WLCW3225Z0□22NPB	22	K , J , G	100	60	300	2300	0.08	600	Red	Red	Brown
WLCW3225Z0□27NPB	27	K , J , G	100	60	300	2000	0.08	600	Red	Violet	Brown
WLCW3225Z0□33NPB	33	K , J , G	100	60	300	1800	0.08	600	Orange	Orange	Brown
WLCW3225Z0□39NPB	39	K , J , G	100	60	300	1800	0.08	600	Orange	White	Brown
WLCW3225Z0□47NPB	47	K , J , G	100	60	300	1600	0.08	600	Yellow	Violet	Brown
WLCW3225Z0□56NPB	56	K , J , G	100	60	300	1500	0.10	600	Green	Blue	Brown
WLCW3225Z0□68NPB	68	K , J , G	100	60	300	1300	0.10	600	Blue	Gray	Brown
WLCW3225Z0□82NPB	82	K , J , G	100	60	300	1200	0.10	600	Gray	Red	Brown
WLCW3225Z0□91NPB	91	K , J , G	100	60	300	1100	0.10	1000	White	Brown	Brown
WLCW3225Z0□R10PB	100	K , J , G	100	60	300	1100	0.10	1000	Brown	Black	Red
WLCW3225Z0□R12PB	120	K , J , G	50	60	300	900	0.12	500	Brown	Red	Red
WLCW3225Z0□R15PB	150	K , J , G	50	60	300	800	0.18	500	Brown	Green	Red
WLCW3225Z0□R18PB	180	K , J , G	50	60	300	760	0.21	500	Brown	Gray	Red
WLCW3225Z0□R22PB	220	K , J , G	50	60	300	760	0.27	500	Red	Red	Red
WLCW3225Z0□R27PB	270	K , J , G	50	50	300	660	0.33	500	Red	Violet	Red
WLCW3225Z0□R33PB	330	K , J , G	50	50	100	650	0.37	500	Orange	Orange	Red
WLCW3225Z0□R36PB	360	K , J , G	50	50	100	500	0.63	600	Orange	Blue	Red
WLCW3225Z0□R39PB	390	K , J , G	50	50	100	600	0.63	500	Orange	White	Red
WLCW3225Z0□R47PB	470	K , J , G	50	50	100	550	0.69	400	Yellow	Violet	Red
WLCW3225Z0□R56PB	560	K , J , G	50	50	100	470	0.90	400	Green	Blue	Red
WLCW3225Z0□R68PB	680	K , J , G	25	50	100	450	1.05	400	Blue	Gray	Red
WLCW3225Z0□R82PB	820	K , J , G	25	50	100	400	1.45	350	Gray	Red	Red
WLCW3225Z0□R91PB	910	K , J , G	25	50	100	400	1.45	350	White	Brown	Red
WLCW3225Z0□1R0PB	1000	K , J , G	25	45	100	340	2.10	280	Brown	Black	Orange
WLCW3225Z0□1R2PB	1200	K , J , G	7.96	45	50	320	2.40	250	Brown	Red	Orange
WLCW3225Z0□1R5PB	1500	K , J , G	7.96	45	50	300	2.70	220	Brown	Green	Orange
WLCW3225Z0□1R8PB	1800	K , J , G	7.96	45	50	280	3.50	180	Brown	Gray	Orange
WLCW3225Z0□2R2PB	2200	K , J , G	7.96	45	50	260	3.80	150	Red	Red	Orange
WLCW3225Z0□3R3PB	3300	K , J , G	27	25	27	140	10	150	Orange	Orange	Orange

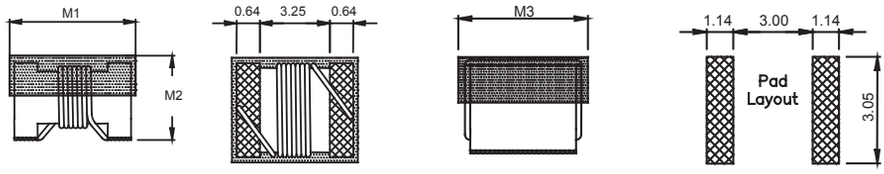
Tolerance : K : ±10%, J : ±5%, G : ±2%
OPERATING TEMPERATURE : -40℃ ~ 125℃
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E
DCR TEST BY ZENTECH 502BC
※MSL : LEVEL 1

Wire Wound Ceramic Chip Inductor WLCW4532 Series

Mechanical Dimensions

(Unit: mm)

WLCW4532



Electrical Specification

Part Number	L (nH) @50MHz	Tolerance	Q @50MHz Typical	SRF MHz Min.	DCR mOHM Max.	Irms (mA)	Color Code		
							1st	2nd	multiplier
WLCW4532Z0□82NPB	82	K , J , G	70	800	60	1500	Gray	Red	Black
WLCW4532Z0□R10PB	100	J , G	70	850	110	1150	Brown	Black	Brown
WLCW4532Z0□R12PB	120	K , J , G	70	800	110	1150	Brown	Red	Brown
WLCW4532Z0□R15PB	150	K , J , G	75	860	110	1150	Brown	Green	Brown
WLCW4532Z0□R18PB	180	K , J , G	80	850	110	1150	Brown	Gray	Brown
WLCW4532Z0□R22PB	220	K , J , G	80	700	105	940	Red	Red	Brown
WLCW4532Z0□R24PB	240	J ,	80	700	110	940	Red	Yellow	Brown
WLCW4532Z0□R27PB	270	K , J , G	85	730	120	940	Red	Violet	Brown
WLCW4532Z0□R33PB	330	K , J , G	80	600	135	850	Orange	Orange	Brown
WLCW4532Z0□R39PB	390	K , J , G	80	600	140	850	Orange	White	Brown
WLCW4532Z0□1R2PB	1200	K , J , G	62	230	1200	480	Brown	Red	Red

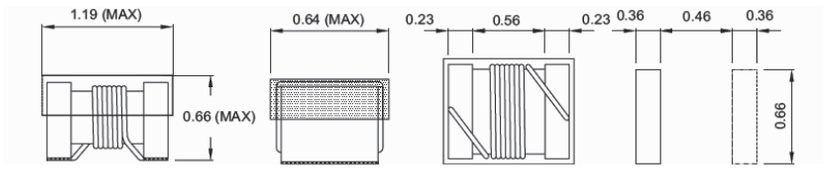
Tolerance: K : ±10%, J: ±5%, G: ±2%
TEMPERATURE: -40℃ ~ 125℃
OPERATING
L, Q TEST BY AGILENT 4291B with 16193A or its equivalent
SRF TEST BY HP 8753E or HP4291B with 16193A or its equivalent
DCR AGILENT 4338B or its equivalent
※MSL: LEVEL 1

Wire Wound Ceramic Chip Inductor WQCW1005 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW1005



Recommend Pattern

Electrical Specification

Part Number	L (nH)	Tolerance	Q (Min)	L (typ)	Q (typ.)	L (typ.)	Q (typ.)	SRF (GHz) Min	RDC Max (Ω)	Irms (mA)
				@900MHz		@1700MHz				
WQCW1005Z0□1N0TB	1	J, K	16	1.02	75	1.02	70	12.7	0.045	1360
WQCW1005Z0□1N2TB	1.2	J, K	16	1.17	30	1.17	40	12.9	0.09	740
WQCW1005Z0□1N8TB	1.8	J, K	16	2.08	59	1.94	74	12	0.07	1040
WQCW1005Z0□1N9TB	1.9	J, K	16	1.72	65	1.74	80	11.3	0.07	1040
WQCW1005Z0□2N0TB	2	G, J, K	16	1.93	54	1.93	75	11.1	0.07	1040
WQCW1005Z0□2N2TB	2.2	G, J, K	19	2.19	55	2.23	82	10.8	0.07	960
WQCW1005Z0□2N4TB	2.4	G, J, K	15	2.24	51	2.27	70	10.5	0.068	790
WQCW1005Z0□2N7TB	2.7	G, J, K	16	2.58	42	2.6	61	10.4	0.12	640
WQCW1005Z0□3N3TB	3.3	G, J, K	19	3.1	65	3.12	80	7	0.066	840
WQCW1005Z0□3N6TB	3.6	G, J, K	19	3.56	45	3.62	71	6.8	0.066	840
WQCW1005Z0□3N9TB	3.9	G, J, K	19	3.89	50	4.14	72	6	0.066	840
WQCW1005Z0□4N3TB	4.3	G, J, K	18	4.19	40	4.3	71	6	0.091	700
WQCW1005Z0□4N7TB	4.7	G, J, K	15	4.78	47	4.59	62	4.7	0.13	640
WQCW1005Z0□5N1TB	5.1	G, J, K	20	5.16	52	5.19	76	4.8	0.083	800
WQCW1005Z0□5N6TB	5.6	G, J, K	20	5.2	48	5.28	75	4.8	0.083	760
WQCW1005Z0□6N2TB	6.2	G, J, K	20	6.15	50	6.2	73	4.8	0.083	760
WQCW1005Z0□6N8TB	6.8	G, J, K	20	6.73	65	6.95	70	4.8	0.083	680
WQCW1005Z0□7N3TB	7.3	G, J, K	20	7.25	58	7.47	71	4.8	0.26	680
WQCW1005Z0□7N5TB	7.5	G, J, K	22	7.91	60	8.22	85	4.8	0.1	680
WQCW1005Z0□8N2TB	8.2	G, J, K	22	8.53	64	8.81	88	4.4	0.1	680
WQCW1005Z0□8N7TB	8.7	G, J, K	18	8.78	54	9.21	73	4.1	0.2	480
WQCW1005Z0□9N1TB	9.1	G, J, K	22	9.27	63	8.61	73	4.16	0.1	680
WQCW1005Z0□9N5TB	9.5	G, J, K	18	9.64	62	9.93	56	4	0.2	480
WQCW1005Z0□10NTB	10	G, J, K	21	10.16	50	9.72	85	3.9	0.2	480
WQCW1005Z0□11NTB	11	G, J, K	24	10.89	53	11.46	77	3.68	0.12	640
WQCW1005Z0□12NTB	12	G, J, K	24	12.71	62	12.87	77	3.6	0.12	640
WQCW1005Z0□13NTB	13	G, J, K	24	13.4	51	14.63	57	3.45	0.21	440
WQCW1005Z0□15NTB	15	G, J, K	24	15.2	55	16.88	76	3.28	0.17	560
WQCW1005Z0□16NTB	16	G, J, K	24	16.43	45	18.79	49	3.1	0.22	560
WQCW1005Z0□18NTP	18	G, J, K	25	17.39	52	22.18	64	3.1	0.23	420
WQCW1005Z0□19NTP	19	G, J, K	24	19.51	60	21.85	72	3.04	0.2	480
WQCW1005Z0□20NTP	20	G, J, K	25	20.7	52	23.66	53	3	0.25	420
WQCW1005Z0□22NTP	22	G, J, K	25	22.33	57	26.54	53	2.8	0.3	400
WQCW1005Z0□23NTP	23	G, J, K	22	23.8	49	26.85	64	2.72	0.3	400
WQCW1005Z0□24NTP	24	G, J, K	25	25.59	59	31.06	56	2.7	0.3	400
WQCW1005Z0□27NTP	27	G, J, K	24	29.26	45	32.56	62	2.48	0.3	400
WQCW1005Z0□30NTP	30	G, J, K	25	31.9	45	40.38	41	2.35	0.3	400
WQCW1005Z0□33NTP	33	G, J, K	24	34.12	35	40.32	36	2.35	0.44	400
WQCW1005Z0□36NTP	36	G, J, K	24	39.5	45	48.4	53	2.32	0.44	320
WQCW1005Z0□39NTP	39	G, J, K	25	42.65	45	50.96	42	2.1	0.55	200
WQCW1005Z0□40NTP	40	G, J, K	24	39.0	44	47.41	35	2.24	0.44	320
WQCW1005Z0□43NTP	43	G, J, K	25	45.8	46	61.55	35	2.03	0.81	100
WQCW1005Z0□47NTP	47	G, J, K	20	52.85	42	-	-	2.1	0.83	150
WQCW1005Z0□51NTP	51	G, J, K	25	56.6	40	-	-	1.75	0.82	100
WQCW1005Z0□56NTP	56	G, J, K	22	58.59	40	-	-	1.76	0.97	100
WQCW1005Z0□68NTP	68	G, J, K	22	72.17	40	-	-	1.62	1.12	100
WQCW1005Z0□72NTP	72	G, J, K	20	-	-	-	-	1.26	2	30
WQCW1005Z0□75NTP	75	G, J, K	20	-	-	-	-	1.62	2	50
WQCW1005Z0□82NTP	82	G, J, K	20	-	-	-	-	1.26	1.55	50
WQCW1005Z0□R10TP	100	G, J, K	20	-	-	-	-	1.16	2	30
WQCW1005Z0□R12TP	120	G, J, K	20	-	-	-	-	1.9	2.2	50

Tolerance: K: ±10%, J: ±5%, G: ±2%
TEMPERATURE RISE: Below 15℃ at Rated Current
Operating Temperature Range: -40℃ ~ +150℃
Storage temperature Component: -40°C to +100°C.
Tape and reel packaging: -40°C to +80°C.

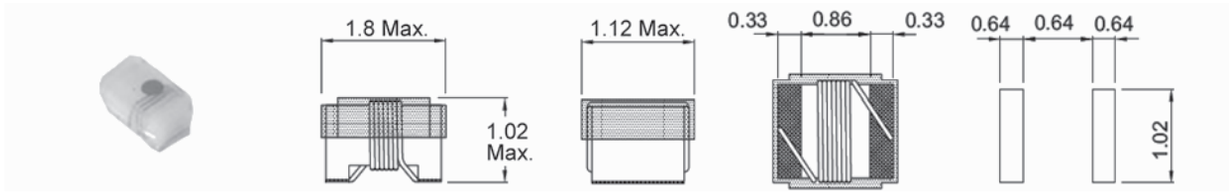
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A WTC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
※MSL: LEVEL 1

Wire Wound Ceramic Chip Inductor WQCW1608 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW1608



Recommend Pattern

Electrical Specification

Part Number	L (nH)	Tolerance	Q (Min)	Test Freq. (MHz)	SRF (MHz) Min	RDC Max (Ω)	Irms (mA)	COLOR CODE
WQCW1608Z0□1N6PB	1.6	J, K	24	250	12500	0.03	700	BLACK
WQCW1608Z0□1N8PB	1.8	J, K	16	250	12500	0.045	700	BROWN
WQCW1608Z0□2N1PB	2.1	J, K	20	250	5800	0.05	700	RED
WQCW1608Z0□2N2PB	2.2	J, K	20	250	5800	0.1	700	ORANGE
WQCW1608Z0□3N3PB	3.3	J, K	20	250	5500	0.07	700	VIOLET
WQCW1608Z0□3N6PB	3.6	J, K	22	250	5900	0.063	700	RED
WQCW1608Z0□3N9PB	3.9	J, K	22	250	6900	0.08	700	ORANGE
WQCW1608Z0□4N3PB	4.3	J, K	22	250	5900	0.063	700	YELLOW
WQCW1608Z0□4N7PB	4.7	J, K	20	250	5800	0.116	700	GREEN
WQCW1608Z0□5N1PB	5.1	J, K	20	250	5700	0.14	700	BLUE
WQCW1608Z0□5N6PB	5.6	J, K	15	250	5800	0.15	700	GRAY
WQCW1608Z0□6N1PB	6.1	J, K	25	250	5800	0.11	700	WHITE
WQCW1608Z0□6N8PB	6.8	G, J, K	27	250	5800	0.11	700	VIOLET
WQCW1608Z0□7N5PB	7.5	G, J, K	28	250	4800	0.106	700	GRAY
WQCW1608Z0□8N2PB	8.2	G, J, K	25	250	5800	0.12	700	BLACK
WQCW1608Z0□8N4PB	8.4	G, J, K	28	250	4600	0.109	700	RED
WQCW1608Z0□8N5PB	8.5	G, J, K	28	250	4600	0.109	700	RED
WQCW1608Z0□8N7PB	8.7	G, J	28	250	4600	0.109	700	WHITE
WQCW1608Z0□9N5PB	9.5	G, J	28	250	5400	0.135	700	BLACK
WQCW1608Z0□10NPB	10	G, J	31	250	4800	0.13	700	BROWN
WQCW1608Z0□11NPB	11	G, J	33	250	4000	0.086	700	RED
WQCW1608Z0□12NPB	12	G, J	35	250	4000	0.13	700	ORANGE
WQCW1608Z0□14NPB	14	G, J	35	250	4000	0.17	700	BROWN
WQCW1608Z0□15NPB	15	G, J	35	250	4000	0.17	700	YELLOW
WQCW1608Z0□16NPB	16	G, J	34	250	3300	0.104	700	GREEN
WQCW1608Z0□18NPB	18	G, J	35	250	3100	0.17	700	BLUE
WQCW1608Z0□20NPB	20	G, J	40	250	3000	0.17	700	GREEN
WQCW1608Z0□22NPB	22	G, J	38	250	3000	0.19	700	VIOLET
WQCW1608Z0□23NPB	23	G, J	38	250	2850	0.19	700	BLACK
WQCW1608Z0□24NPB	24	G, J	37	250	2650	0.135	700	GRAY
WQCW1608Z0□27NPB	27	G, J	40	250	2800	0.22	600	WHITE
WQCW1608Z0□30NPB	30	G, J	37	250	2250	0.22	600	BLACK
WQCW1608Z0□33NPB	33	G, J	40	250	2300	0.22	600	BROWN
WQCW1608Z0□36NPB	36	G, J	38	250	2080	0.25	600	RED
WQCW1608Z0□39NPB	39	G, J	40	250	2200	0.25	600	ORANGE
WQCW1608Z0□43NPB	43	G, J	39	250	2000	0.28	600	YELLOW
WQCW1608Z0□47NPB	47	G, J	38	200	2000	0.28	600	GREEN
WQCW1608Z0□51NPB	51	G, J	35	200	1900	0.27	600	BROWN
WQCW1608Z0□56NPB	56	G, J	38	200	1900	0.31	600	BLUE
WQCW1608Z0□62NPB	62	G, J	37	200	1800	0.34	600	GRAY
WQCW1608Z0□68NPB	68	G, J	37	200	1700	0.34	600	VIOLET
WQCW1608Z0□72NPB	72	G, J	34	150	1700	0.49	400	GRAY
WQCW1608Z0□82NPB	82	G, J	34	150	1700	0.54	400	WHITE
WQCW1608Z0□91NPB	91	G, J	30	150	1700	0.5	400	BROWN
WQCW1608Z0□R10PB	100	G, J	34	150	1400	0.58	400	BLACK
WQCW1608Z0□R11PB	110	G, J	32	150	1350	0.61	300	BROWN

Electrical Specification (continuous)

Part Number	L (nH)	Tolerance	Q (Min)	Test Freq. (MHz)	SRF (MHz) Min	RDC Max (Ω)	Irms (mA)	COLOR CODE
WQCW1608Z0□R12PB	120	G, J	32	150	1300	0.65	300	RED
WQCW1608Z0□R13PB	130	G, J	30	150	1400	0.72	300	WHITE
WQCW1608Z0□R15PB	150	G, J	28	150	990	0.92	280	ORANGE
WQCW1608Z0□R18PB	180	G, J	25	100	990	1.25	240	YELLOW
WQCW1608Z0□R20PB	200	G, J	25	100	990	1.98	200	RED
WQCW1608Z0□R22PB	220	G, J	25	100	900	1.9	200	GREEN
WQCW1608Z0□R25PB	250	G, J	25	100	822	3.55	120	YELLOW
WQCW1608Z0□R26PB	260	G, J	25	100	1000	2	200	VIOLET
WQCW1608Z0□R27PB	270	G, J	24	100	900	2.3	170	BLUE
WQCW1608Z0□R33PB	330	G, J	24	100	900	3.9	185	VIOLET
WQCW1608Z0□R39PB	390	G, J	25	100	900	4.35	100	GRAY
WQCW1608Z0□R43PB	430	G, J	25	100	900	5	100	GRAY
WQCW1608Z0□R47PB	470	G, J	25	100	600	5.5	80	WHITE

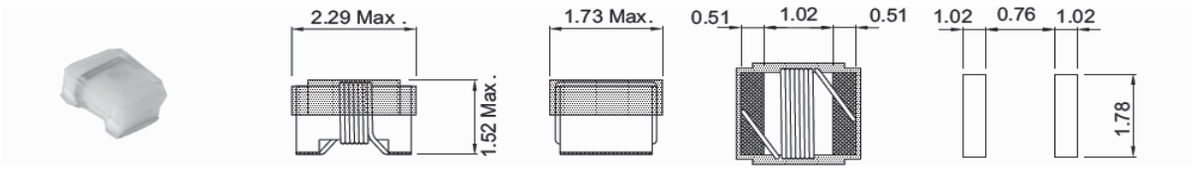
Tolerance: K: ±10%, J: ±5%, G: ±2%
TEMPERATURE RISE: Below 15℃ at Rated Current
Operating Temperature Range: -40℃ ~ +150℃
Storage temperature Component: -40°C to +100°C.
Tape and reel packaging: -40°C to +80°C.
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A WTC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
※MSL: LEVEL 1

Wire Wound Ceramic Chip Inductor WQCW2012 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW2012



Recommend Pattern

Electrical Specification

Part Number	L (nH)	Test Freq. (MHz) for L	Tolerance	Q (Min)	Test Freq. (MHz) for Q	SRF (MHz) Min	RDC Max (Ω)	Irms (mA)	COLOR CODE
WQCW2012Z0□2N2PB	2.2	250	K, J	35	1500	3000	0.08	600	WHITE
WQCW2012Z0□2N7PB	2.7	250	K, J	80	1500	7900	0.03	600	BROWN
WQCW2012Z0□2N8PB	2.8	250	K, J	80	1500	7900	0.06	800	RED
WQCW2012Z0□2N9PB	2.9	250	K, J	50	1500	4700	0.05	600	BLUE
WQCW2012Z0□3N0PB	3.0	250	K, J	65	1500	7900	0.06	800	VIOLET
WQCW2012Z0□3N3PB	3.3	250	K, J	50	1500	7900	0.08	600	BLACK
WQCW2012Z0□5N6PB	5.6	250	K, J	65	1000	5500	0.08	600	VILOET
WQCW2012Z0□6N8PB	6.8	250	K, J	50	1000	5500	0.11	600	BROWN
WQCW2012Z0□7N5PB	7.5	250	K, J	50	1000	5500	0.10	600	BLACK
WQCW2012Z0□8N2PB	8.2	250	K, J, G	50	1000	4700	0.12	600	RED
WQCW2012Z0□8N7PB	8.7	250	K, J, G	50	1000	4700	0.10	400	WHITE
WQCW2012Z0□10NPB	10	250	K, J, G	60	500	4200	0.10	600	RED
WQCW2012Z0□12NPB	12	250	K, J, G	50	500	4000	0.15	600	ORANGE
WQCW2012Z0□15NPB	15	250	K, J, G	50	500	3400	0.17	600	YELLOW
WQCW2012Z0□18NPB	18	250	K, J, G	50	500	3300	0.20	600	GREEN
WQCW2012Z0□22NPB	22	250	K, J, G	55	500	2600	0.22	500	BLUE
WQCW2012Z0□24NPB	24	250	K, J, G	50	500	2000	0.22	500	RED
WQCW2012Z0□27NPB	27	250	K, J, G	55	500	2500	0.25	500	VIOLET
WQCW2012Z0□33NPB	33	250	K, J, G	60	500	2050	0.27	500	GRAY
WQCW2012Z0□36NPB	36	250	K, J, G	55	500	1700	0.27	500	YELLOW
WQCW2012Z0□39NPB	39	250	K, J, G	60	500	2000	0.29	500	WHITE
WQCW2012Z0□43N|PB	43	200	K, J, G	60	500	1650	0.34	500	YELLOW
WQCW2012Z0□47NPB	47	200	K, J, G	60	500	1650	0.31	500	BLACK
WQCW2012Z0□56NPB	56	200	K, J, G	60	500	1550	0.34	500	BROWN
WQCW2012Z0□68NPB	68	200	K, J, G	60	500	1450	0.38	500	RED
WQCW2012Z0□82NPB	82	150	K, J, G	65	500	1300	0.42	400	ORANGE
WQCW2012Z0□91NPB	91	150	K, J, G	65	500	1200	0.48	400	BLUE
WQCW2012Z0□R10PB	100	150	K, J, G	65	500	1200	0.46	400	YELLOW
WQCW2012Z0□R11PB	110	150	K, J, G	50	500	1000	0.48	400	VIOLET
WQCW2012Z0□R12PB	120	150	K, J, G	50	250	1100	0.51	400	GREEN
WQCW2012Z0□R15PB	150	100	K, J, G	50	250	920	0.56	400	BLUE
WQCW2012Z0□R18PB	180	100	K, J, G	50	250	870	0.64	400	VIOLET
WQCW2012Z0□R20PB	200	100	K, J, G	50	250	860	0.68	400	RED
WQCW2012Z0□R22PB	220	100	K, J, G	50	250	850	0.70	400	GRAY
WQCW2012Z0□R24PB	240	100	K, J, G	44	250	690	1.00	350	BLACK
WQCW2012Z0□R25PB	250	100	K, J, G	50	250	680	1.00	350	YELLOW
WQCW2012Z0□R27PB	270	100	K, J, G	48	250	650	1.00	350	WHITE
WQCW2012Z0□R30PB	300	100	K, J, G	48	250	620	1.20	310	GRAY
WQCW2012Z0□R33PB	330	100	K, J, G	48	250	600	1.40	300	BLACK
WQCW2012Z0□R39PB	390	100	K, J, G	48	250	560	1.50	290	BROWN
WQCW2012Z0□R43PB	430	100	K, J, G	33	100	430	1.70	190	WHITE
WQCW2012Z0□R47PB	470	50	K, J	33	100	380	1.70	250	VIOLET
WQCW2012Z0□R56PB	560	25	K, J	23	50	340	1.90	230	ORANGE
WQCW2012Z0□R62PB	620	25	K, J	23	50	200	2.00	190	ORANGE
WQCW2012Z0□R68PB	680	25	K, J	23	50	188	2.20	190	GREEN
WQCW2012Z0□R82PB	820	25	K, J	23	50	215	2.35	180	BROWN
WQCW2012Z0□1R0PB	1000	25	K, J	23	50	100	2.7	170	BLACK
WQCW2012Z0□R36PB	360	100	K, J, G	35	250	460	0.90	300	ORANGE

Tolerance: K: ±10%, J: ±5%, G: ±2%
TEMPERATURE RISE: Below 15℃ at Rated Current
Operating Temperature Range: -40℃ ~ +150℃
Storage temperature Component: -40°C to +100°C.
Tape and reel packaging: -40°C to +80°C.

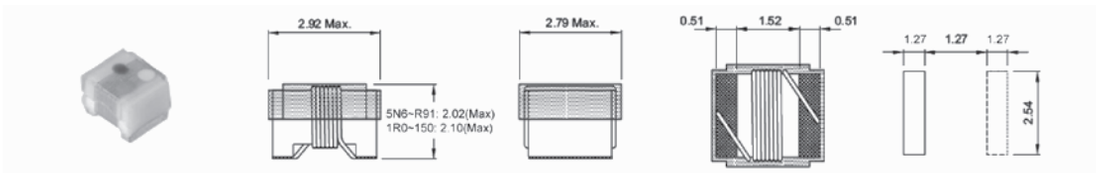
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A WTC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
※MSL: LEVEL 1

Wire Wound Ceramic Chip Inductor WQCW2520 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW2520



Recommend Pattern

Electrical Specification

Part Number	L (nH)	Tolerance	Measuring Frequency (MHz)	Q (Min)	Test Freq (MHz)	SRF (GHz) Min	RDC Max (Ω)	Irms (mA)	Color Code		
									1st	2nd	multiplier
WQCW2520Z0□10NPB	10	J, K	50	50	500	4.10	0.08	1000	BROWN	BLACK	BLACK
WQCW2520Z0□12NPB	12	J, K	50	50	500	3.30	0.09	1000	BROWN	RED	BLACK
WQCW2520Z0□15NPB	15	J, K	50	50	500	2.50	0.10	1000	BROWN	GREEN	BLACK
WQCW2520Z0□18NPB	18	G, J, K	50	50	350	2.50	0.11	1000	BROWN	GRAY	BLACK
WQCW2520Z0□22NPB	22	G, J, K	50	55	350	2.40	0.12	1000	RED	RED	BLACK
WQCW2520Z0□24NPB	24	G, J, K	50	50	350	1.90	0.13	1000	RED	YELLOW	BLACK
WQCW2520Z0□27NPB	27	G, J, K	50	55	350	1.60	0.13	1000	RED	VIOLET	BLACK
WQCW2520Z0□33NPB	33	G, J, K	50	60	350	1.60	0.14	1000	ORANGE	ORANGE	BLACK
WQCW2520Z0□39NPB	39	G, J, K	50	60	350	1.50	0.15	1000	ORANGE	WHITE	BLACK
WQCW2520Z0□47NPB	47	G, J, K	50	65	350	1.50	0.16	1000	YELLOW	VIOLET	BLACK
WQCW2520Z0□56NPB	56	G, J, K	50	65	350	1.30	0.18	1000	GREEN	BLUE	BLACK
WQCW2520Z0□68NPB	68	G, J, K	50	65	350	1.30	0.20	1000	BLUE	GRAY	BLACK
WQCW2520Z0□82NPB	82	G, J, K	50	60	350	1.00	0.22	1000	GRAY	RED	BLACK
WQCW2520Z0□R10PB	100	G, J, K	25	60	350	1.00	0.56	650	BROWN	BLACK	BROWN
WQCW2520Z0□R12PB	120	G, J, K	25	60	350	0.950	0.63	650	BROWN	RED	BROWN
WQCW2520Z0□R15PB	150	G, J, K	25	45	100	0.850	0.70	580	BROWN	GREEN	BROWN
WQCW2520Z0□R18PB	180	G, J, K	25	45	100	0.750	0.77	620	BROWN	GRAY	BROWN
WQCW2520Z0□R20PB	200	G, J, K	25	50	100	0.750	0.81	500	RED	BLACK	BROWN
WQCW2520Z0□R22PB	220	G, J, K	25	45	100	0.700	0.84	500	RED	RED	BROWN
WQCW2520Z0□R24PB	240	G, J, K	25	50	100	0.650	0.84	500	RED	YELLOW	BROWN
WQCW2520Z0□R27PB	270	G, J, K	25	45	100	0.600	0.91	500	RED	VIOLET	BROWN
WQCW2520Z0□R30PB	300	G, J, K	25	45	100	0.585	1.05	660	ORANGE	BLACK	BROWN
WQCW2520Z0□R33PB	330	G, J, K	25	45	100	0.570	1.05	450	ORANGE	ORANGE	BROWN
WQCW2520Z0□R36PB	360	G, J, K	25	45	100	0.530	1.05	660	ORANGE	BLUE	BROWN
WQCW2520Z0□R39PB	390	G, J, K	25	45	100	0.500	1.12	470	ORANGE	WHITE	BROWN
WQCW2520Z0□R43PB	430	G, J, K	25	45	100	0.480	1.19	600	YELLOW	ORANGE	BROWN
WQCW2520Z0□R47PB	470	G, J, K	25	45	100	0.450	1.19	470	YELLOW	VIOLET	BROWN
WQCW2520Z0□R56PB	560	G, J, K	25	45	100	0.415	1.33	400	GREEN	BLUE	BROWN
WQCW2520Z0□R62PB	620	G, J, K	25	45	100	0.375	1.40	300	BLUE	RED	BROWN
WQCW2520Z0□R68PB	680	G, J, K	25	45	100	0.375	1.47	400	BLUE	GRAY	BROWN
WQCW2520Z0□R75PB	750	G, J, K	25	45	100	0.360	1.54	360	VIOLET	GREEN	BROWN
WQCW2520Z0□R82PB	820	G, J, K	25	45	100	0.350	1.61	400	GRAY	RED	BROWN
WQCW2520Z0□R91PB	910	G, J, K	25	35	50	0.320	1.68	380	WHITE	BROWN	BROWN
WQCW2520Z0□1R0PB	1000	G, J, K	25	35	50	0.290	1.75	370	BROWN	BLACK	RED
WQCW2520Z0□1R2PB	1200	G, J, K	7.9	35	50	0.250	2.00	310	BROWN	RED	RED
WQCW2520Z0□1R5PB	1500	G, J, K	7.9	28	50	0.200	2.30	330	BROWN	GREEN	RED
WQCW2520Z0□1R8PB	1800	G, J, K	7.9	28	50	0.160	2.60	300	BROWN	GRAY	RED
WQCW2520Z0□2R0PB	2000	G, J, K	7.9	25	50	0.160	2.80	280	RED	BLACK	RED
WQCW2520Z0□2R2PB	2200	G, J, K	7.9	28	50	0.160	2.80	280	RED	RED	RED
WQCW2520Z0□2R7PB	2700	G, J, K	7.9	22	25	0.140	3.20	290	RED	VIOLET	RED
WQCW2520Z0□3R3PB	3300	G, J, K	7.9	22	25	0.110	3.40	290	ORANGE	ORANGE	RED
WQCW2520Z0□3R9PB	3900	G, J, K	7.9	20	25	0.100	3.60	260	ORANGE	WHITE	RED

TOLERANCE : K = ±10%, J = ±5%, G = ±2%

L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A
TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A PDC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
CURRENT THAT CAUSES A 15°C TEMPERATURE RISE FROM 25°C AMBIENT.

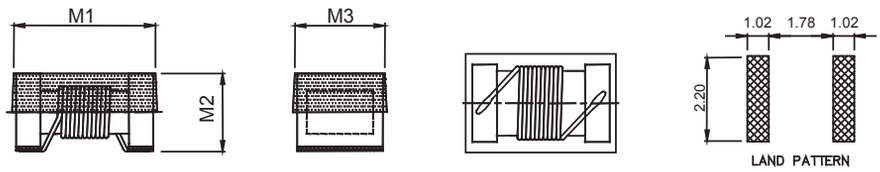
ELECTRICAL SPECIFICATIONS AT 25°C.
OPERATING TEMPERATURE: -40℃ ~ +150℃
STORAGE TEMPERATURE COMPONENT: –40°C to +100°C.
TAPE AND REEL PACKAGING: -40°C to +80°C.
MEAN TIME BETWEEN FAILURES (MTBF) 1 BILLION HOURS
GRAPHIC IS ONLY FOR DIMENSIONALLY APPLICATION.
※MSL: LEVEL 1 (UNLIMITED FLOOR LIFE AT < 30°C / 85% RELATIVE HUMIDITY)

Wire Wound Ceramic Chip Inductor WQCW3235 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW3225



Electrical Specification

Part Number	L (nH)	Tolerance	Measuring Frequency (MHz)	Q (Min)	Test Freq (MHz)	SRF (GHz)Min	DCR Max (Ω)	Irms (mA)	Color Code		
									1st	2nd	multiplier
WQCW3225Z0□4N7PB	4.7	J	100	50	1000	6000	0.06	600	Yellow	Violet	Black
WQCW3225Z0□5N6PB	5.6	J	100	50	1000	5500	0.08	600	Green	Blue	Black
WQCW3225Z0□10NPB	10	J	100	60	500	4000	0.06	600	Brown	Black	Brown
WQCW3225Z0□12NPB	12	J	100	60	500	3400	0.06	600	Brown	Red	Brown
WQCW3225Z0□15NPB	15	J	100	60	500	3200	0.06	600	Brown	Green	Brown
WQCW3225Z0□18NPB	18	J	100	60	300	2800	0.06	600	Brown	Gray	Brown
WQCW3225Z0□22NPB	22	J	100	60	300	2300	0.08	600	Red	Red	Brown
WQCW3225Z0□27NPB	27	J	100	60	300	2000	0.08	600	Red	Violet	Brown
WQCW3225Z0□33NPB	33	J	100	60	300	1800	0.08	600	Orange	Orange	Brown
WQCW3225Z0□39NPB	39	J	100	60	300	1800	0.08	600	Orange	White	Brown
WQCW3225Z0□47NPB	47	J	100	60	300	1600	0.08	600	Yellow	Violet	Brown
WQCW3225Z0□56NPB	56	J	100	60	300	1500	0.10	600	Green	Blue	Brown
WQCW3225Z0□68NPB	68	J	100	60	300	1300	0.10	600	Blue	Gray	Brown
WQCW3225Z0□82NPB	82	J	100	60	300	1200	0.10	600	Gray	Red	Brown
WQCW3225Z0□91NPB	91	J	100	60	300	1100	0.10	1000	White	Brown	Brown
WQCW3225Z0□R10PB	100	J	100	60	300	1100	0.10	1000	Brown	Black	Red
WQCW3225Z0□R12PB	120	J	50	60	300	900	0.12	500	Brown	Red	Red
WQCW3225Z0□R15PB	150	J	50	60	300	800	0.18	500	Brown	Green	Red
WQCW3225Z0□R18PB	180	J	50	60	300	760	0.21	500	Brown	Gray	Red
WQCW3225Z0□R22PB	220	J	50	60	300	760	0.27	500	Red	Red	Red
WQCW3225Z0□R27PB	270	J	50	50	300	660	0.33	500	Red	Violet	Red
WQCW3225Z0□R33PB	330	J	50	50	100	650	0.37	500	Orange	Orange	Red
WQCW3225Z0□R36PB	360	J	50	50	100	500	0.63	600	Orange	Blue	Red
WQCW3225Z0□R39PB	390	J	50	50	100	600	0.63	500	Orange	White	Red
WQCW3225Z0□R47PB	470	J	50	50	100	550	0.69	400	Yellow	Violet	Red
WQCW3225Z0□R56PB	560	J	50	50	100	470	0.90	400	Green	Blue	Red
WQCW3225Z0□R68PB	680	J	25	50	100	450	1.05	400	Blue	Gray	Red
WQCW3225Z0□R82PB	820	J	25	50	100	400	1.45	350	Gray	Red	Red
WQCW3225Z0□R91PB	910	J	25	50	100	400	1.45	350	White	Brown	Red
WQCW3225Z0□1R0PB	1000	J	25	45	100	340	2.10	280	Brown	Black	Orange
WQCW3225Z0□1R2PB	1200	J	7.96	45	50	320	2.40	250	Brown	Red	Orange
WQCW3225Z0□1R5PB	1500	J	7.96	45	50	300	2.70	220	Brown	Green	Orange
WQCW3225Z0□1R8PB	1800	J	7.96	45	50	280	3.50	180	Brown	Gray	Orange
WQCW3225Z0□2R2PB	2200	J	7.96	45	50	260	3.80	150	Red	Red	Orange
WQCW3225Z0□3R3PB	3300	J	27	25	27	140	10	150	Orange	Orange	Orange

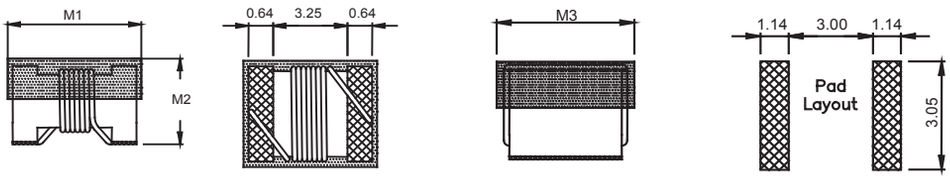
TOLERANCE: J = ±5%
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A PDC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
CURRENT THAT CAUSES A 15°C TEMPERATURE RISE FROM 25°C AMBIENT.
ELECTRICAL SPECIFICATIONS AT 25°C.
OPERATING TEMPERATURE: -40℃ ~ +150℃.
STORAGE TEMPERATURE COMPONENT: –40°C to +100°C. TAPE AND REEL PACKAGING: -40°C to +80°C.
MEAN TIME BETWEEN FAILURES (MTBF) 1 BILLION HOURS.
GRAPHIC IS ONLY FOR DIMENSIONALLY APPLICATION.
※MSL: LEVEL 1 (UNLIMITED FLOOR LIFE AT < 30°C / 85% RELATIVE HUMIDITY)

Wire Wound Ceramic Chip Inductor WQCW4532 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCW4532



Electrical Specification

Part Number	L (nH) @50MHz	Tolerance	Q @50MHz Typical	SRF MHz Min.	DCR mOHM Max.	Irms (mA)	Color Code		
							1st	2nd	multiplier
WQCW4532Z0□82NPB	82	G	70	800	60	1500	Gray	Red	Black
WQCW4532Z0□R10PB	100	G	70	850	110	1150	Brown	Black	Brown
WQCW4532Z0□R12PB	120	G	70	800	110	1150	Brown	Red	Brown
WQCW4532Z0□R15PB	150	G	75	860	110	1150	Brown	Green	Brown
WQCW4532Z0□R18PB	180	G	80	850	110	1150	Brown	Gray	Brown
WQCW4532Z0□R22PB	220	G	80	700	105	940	Red	Red	Brown
WQCW4532Z0□R27PB	270	G	85	730	120	940	Red	Violet	Brown
WQCW4532Z0□R33PB	330	G	80	600	135	850	Orange	Orange	Brown
WQCW4532Z0□R39PB	390	G	80	600	140	850	Orange	White	Brown
WQCW4532Z0□1R2PB	1200	G	62	230	1200	480	Brown	Red	Red

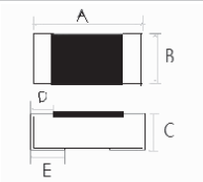
TOLERANCE: G = ±2%
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A PDC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
CURRENT THAT CAUSES A 15°C TEMPERATURE RISE FROM 25°C AMBIENT.
ELECTRICAL SPECIFICATIONS AT 25°C.
OPERATING TEMPERATURE: -40℃ ~ +150℃.
STORAGE TEMPERATURE COMPONENT: -40°C to +100°C.
TAPE AND REEL PACKAGING: -40°C to +80°C.
MEAN TIME BETWEEN FAILURES (MTBF) 1 BILLION HOURS
GRAPHIC IS ONLY FOR DIMENSIONALLY APPLICATION.
※MSL: LEVEL 1 (UNLIMITED FLOOR LIFE AT < 30°C / 85% RELATIVE HUMIDITY))

Thin Film Chip Inductor WLTF0603 Series

Mechanical Dimensions

(Unit: mm)

WLTF0603



WLTF Series	A	B	C	D	E
WLTF0603	0.60±0.05	0.30±0.05	0.28±0.05	0.10±0.05	0.15±0.05

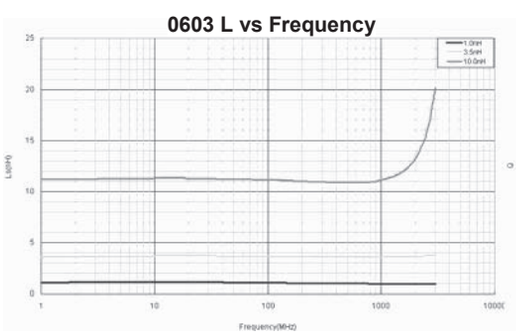
Electrical Specification

Walsin Part Number	Inductance (nH)	Inductance Tolerance (% or nH)	Quality Factor /min.	Resistance DC/Max (Ohm)	Self Resonant Frequency/min.(GHz)	Rated Current (mA) Max.
WLTF0603Z0□0N6TB	0.6	0.1/0.2/0.3nH	12 / 500MHz	0.12	16	850
WLTF0603Z0□0N7TB	0.7	0.1/0.2/0.3nH	12 / 500MHz	0.12	16	750
WLTF0603Z0□0N8TB	0.8	0.1/0.2/0.3nH	12 / 500MHz	0.12	16	750
WLTF0603Z0□0N9TB	0.9	0.1/0.2/0.3nH	12 / 500MHz	0.12	16	700
WLTF0603Z0□1N0TB	1.0	0.1/0.2/0.3nH	12 / 500MHz	0.12	16	600
WLTF0603Z0□1N1TB	1.1	0.1/0.2/0.3nH	12 / 500MHz	0.18	15	600
WLTF0603Z0□1N2TB	1.2	0.1/0.2/0.3nH	12 / 500MHz	0.18	15	600
WLTF0603Z0□1N3TB	1.3	0.1/0.2/0.3nH	12 / 500MHz	0.18	15	600
WLTF0603Z0□1N4TB	1.4	0.1/0.2/0.3nH	12 / 500MHz	0.18	13	600
WLTF0603Z0□1N5TB	1.5	0.1/0.2/0.3nH	12 / 500MHz	0.23	13	600
WLTF0603Z0□1N6TB	1.6	0.1/0.2/0.3nH	12 / 500MHz	0.35	13	600
WLTF0603Z0□1N7TB	1.7	0.1/0.2/0.3nH	12 / 500MHz	0.35	13	500
WLTF0603Z0□1N8TB	1.8	0.1/0.2/0.3nH	12 / 500MHz	0.35	12	500
WLTF0603Z0□1N9TB	1.9	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N0TB	2.0	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N1TB	2.1	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N2TB	2.2	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N3TB	2.3	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N4TB	2.4	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N5TB	2.5	0.1/0.2/0.3nH	12 / 500MHz	0.45	10	420
WLTF0603Z0□2N6TB	2.6	0.1/0.2/0.3nH	12 / 500MHz	0.45	9	420
WLTF0603Z0□2N7TB	2.7	0.1/0.2/0.3nH	12 / 500MHz	0.45	9	420
WLTF0603Z0□2N8TB	2.8	0.1/0.2/0.3nH	12 / 500MHz	0.45	9	420
WLTF0603Z0□2N9TB	2.9	0.1/0.2/0.3nH	12 / 500MHz	0.75	9	420
WLTF0603Z0□3N0TB	3.0	0.1/0.2/0.3nH	12 / 500MHz	0.75	9	420
WLTF0603Z0□3N1TB	3.1	0.1/0.2/0.3nH	12 / 500MHz	0.75	8	380
WLTF0603Z0□3N2TB	3.2	0.1/0.2/0.3nH	12 / 500MHz	0.75	8	380
WLTF0603Z0□3N3TB	3.3	0.1/0.2/0.3nH	12 / 500MHz	0.75	8	380
WLTF0603Z0□3N4TB	3.4	0.1/0.2/0.3nH	12 / 500MHz	0.85	8	300
WLTF0603Z0□3N5TB	3.5	0.1/0.2/0.3nH	12 / 500MHz	0.85	8	300
WLTF0603Z0□3N6TB	3.6	0.1/0.2/0.3nH	12 / 500MHz	1.1	8	280
WLTF0603Z0□3N7TB	3.7	0.1/0.2/0.3nH	12 / 500MHz	1.1	8	280
WLTF0603Z0□3N8TB	3.8	0.1/0.2/0.3nH	12 / 500MHz	1.1	8	280
WLTF0603Z0□3N9TB	3.9	0.1/0.2/0.3nH	12 / 500MHz	1.1	8	280
WLTF0603Z0□4N0TB	4.0	0.1/0.2/0.3nH	12 / 500MHz	1.1	6	280
WLTF0603Z0□4N7TB	4.7	3/5%	12 / 500MHz	1.1	6	230
WLTF0603Z0□5N6TB	5.6	3/5%	12 / 500MHz	1.6	6	200
WLTF0603Z0□6N8TB	6.8	3/5%	12 / 500MHz	1.6	5	200
WLTF0603Z0□8N2TB	8.2	3/5%	12 / 500MHz	1.6	4	200
WLTF0603Z0□10N0TB	10.0	3/5%	12 / 500MHz	1.6	3.5	190

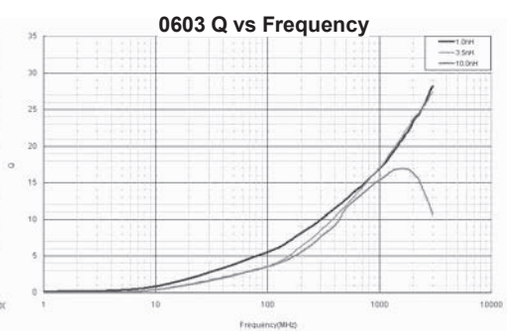
1. L&Q Test Equipment: Agilent 4287A+ 16197A 2. RDC Test Equipment: Hioki RM3542

Typical Electrical Characteristic

0603 L vs Frequency



0603 Q vs Frequency

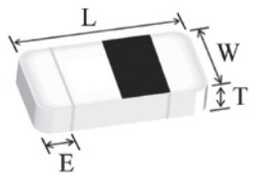


Multi-Layer High Frequency Inductor WLCM0603 Series

Mechanical Dimensions

(Unit: mm)

WLCM0603



WLCM Series	L	W	T	E (Min/Max)
WLCM0603 (EIA 0201)	0.60±0.03	0.30±0.03	0.30±0.03	0.10~0.20

Electrical Specification

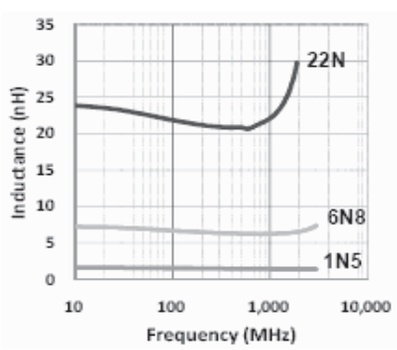
Walsin Part Number	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF (MHz)	RDC (Ω)	Rated Current (mA) Max.
					Min.	Max.	
WLCM0603Z0□0N3TB	0.3	B, C, S	4	100	10,000	0.07	850
WLCM0603Z0□0N4TB	0.4	B, C, S	4	100	10,000	0.07	850
WLCM0603Z0□0N5TB	0.5	B, C, S	4	100	10,000	0.08	800
WLCM0603Z0□0N6TB	0.6	B, C, S	4	100	10,000	0.08	800
WLCM0603Z0□0N7TB	0.7	B, C, S	4	100	10,000	0.09	750
WLCM0603Z0□0N8TB	0.8	B, C, S	4	100	10,000	0.10	750
WLCM0603Z0□0N9TB	0.9	B, C, S	4	100	10,000	0.10	750
WLCM0603Z0□1N0TB	1.0	B, C, S	4	100	10,000	0.14	600
WLCM0603Z0□1N1TB	1.1	B, C, S	4	100	10,000	0.14	600
WLCM0603Z0□1N2TB	1.2	B, C, S	4	100	10,000	0.14	600
WLCM0603Z0□1N3TB	1.3	B, C, S	4	100	10,000	0.14	600
WLCM0603Z0□1N4TB	1.4	B, C, S	4	100	10,000	0.18	550
WLCM0603Z0□1N5TB	1.5	B, C, S	4	100	10,000	0.18	550
WLCM0603Z0□1N6TB	1.6	B, C, S	4	100	10,000	0.18	500
WLCM0603Z0□1N7TB	1.7	B, C, S	4	100	10,000	0.19	500
WLCM0603Z0□1N8TB	1.8	B, C, S	4	100	10,000	0.19	500
WLCM0603Z0□1N9TB	1.9	B, C, S	4	100	10,000	0.20	450
WLCM0603Z0□2N0TB	2.0	B, C, S	4	100	10,000	0.20	450
WLCM0603Z0□2N1TB	2.1	B, C, S	4	100	10,000	0.20	450
WLCM0603Z0□2N2TB	2.2	B, C, S	4	100	10,000	0.22	450
WLCM0603Z0□2N3TB	2.3	B, C, S	4	100	10,000	0.22	450
WLCM0603Z0□2N4TB	2.4	B, C, S	4	100	10,000	0.24	450
WLCM0603Z0□2N5TB	2.5	B, C, S	4	100	10,000	0.24	450
WLCM0603Z0□2N6TB	2.6	B, C, S	4	100	10,000	0.25	450
WLCM0603Z0□2N7TB	2.7	B, C, S	5	100	10,000	0.25	450
WLCM0603Z0□2N9TB	2.9	B, C, S	5	100	9,500	0.28	450
WLCM0603Z0□3N0TB	3.0	B, C, S	5	100	9,500	0.28	450
WLCM0603Z0□3N1TB	3.1	B, C, S	5	100	9,500	0.28	450
WLCM0603Z0□3N2TB	3.2	B, C, S	5	100	9,500	0.30	450
WLCM0603Z0□3N3TB	3.3	B, C, S	5	100	9,500	0.30	450
WLCM0603Z0□3N4TB	3.4	B, C, S	5	100	8,000	0.30	400
WLCM0603Z0□3N5TB	3.5	B, C, S	5	100	8,000	0.30	400
WLCM0603Z0□3N6TB	3.6	B, C, S	5	100	8,000	0.30	400
WLCM0603Z0□3N7TB	3.7	B, C, S	5	100	8,000	0.30	400
WLCM0603Z0□3N8TB	3.8	B, C, S	5	100	6,500	0.30	400
WLCM0603Z0□3N9TB	3.9	B, C, S	5	100	6,500	0.30	400
WLCM0603Z0□4N3TB	4.3	B, C, S	5	100	6,500	0.40	350
WLCM0603Z0□4N7TB	4.7	B, C, S	5	100	6,500	0.40	350
WLCM0603Z0□5N1TB	5.1	B, C, S	5	100	6,500	0.40	350
WLCM0603Z0□5N6TB	5.6	B, C, S	5	100	6,000	0.40	350
WLCM0603Z0□6N2TB	6.2	B, C, S	5	100	6,000	0.44	300
WLCM0603Z0□6N8TB	6.8	H,J	5	100	5,400	0.50	300
WLCM0603Z0□7N5TB	7.5	H,J	5	100	4,800	0.53	300
WLCM0603Z0□8N2TB	8.2	H,J	5	100	4,800	0.55	250
WLCM0603Z0□9N1TB	9.1	H,J	5	100	4,500	0.62	250
WLCM0603Z0□10NTB	10	H,J	5	100	4,500	0.65	250

Electrical Specification (continuous)

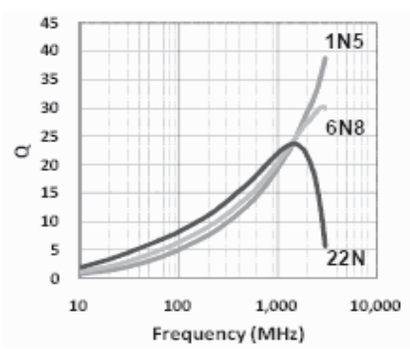
Walsin Part Number	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF (MHz)	RDC (Ω)	Rated Current (mA) Max.
					Min.	Max.	
WLCM0603Z0□12NTB	12	H,J	5	100	3,700	0.70	250
WLCM0603Z0□15NTB	15	H,J	5	100	2,200	0.80	250
WLCM0603Z0□18NTB	18	H,J	5	100	2,200	0.90	200
WLCM0603Z0□22NTB	22	H,J	5	100	2,000	1.20	150
WLCM0603Z0□27NTB	27	H,J	4	100	1,800	1.80	140
WLCM0603Z0□33NTB	33	J	4	100	1,700	2.10	120
WLCM0603Z0□39NTB	39	J	4	100	1,500	2.40	120
WLCM0603Z0□47NTB	47	J	4	100	1,300	2.80	100
WLCM0603Z0□56NTB	56	J	4	100	1,100	3.00	80
WLCM0603Z0□68NTB	68	J	4	100	1,100	2.66	80
WLCM0603Z0□82NTB	82	J	4	100	1,000	3.37	70
WLCM0603Z0□R10TB	100	J	4	100	900	3.74	60

Operating Temperature range: -55℃ to 125℃

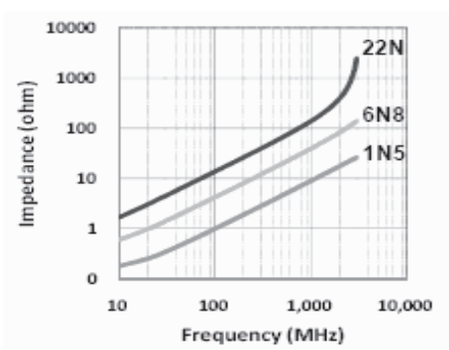
Typical Electrical Characteristic



0603 L vs. Frequency



0603 Q vs. Frequency



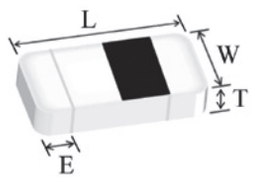
0603 Z vs. Frequency

Multi-Layer High Frequency Inductor WLCM1005 Series

Mechanical Dimensions

(Unit: mm)

WLCM1005



WLCM Series	L	W	T	E (Min/Max)
WLCM1005 (EIA 0402)	1.00±0.10	0.50±0.10	0.50±0.10	0.10~0.30

Electrical Specification

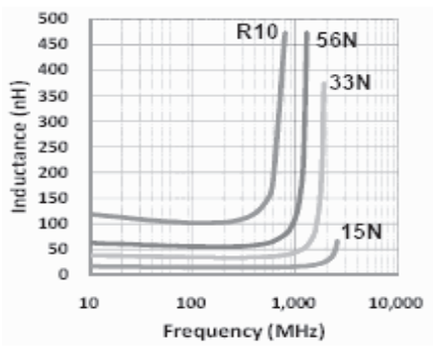
Walsin Part Number	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF (MHz)	RDC (Ω)	Rated Current (mA) Max.
					Min.	Max.	
WLCM1005Z0□0N3TB	0.3	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□0N4TB	0.4	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□0N5TB	0.5	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□0N6TB	0.6	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□0N7TB	0.7	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□0N8TB	0.8	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□1N0TB	1.0	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□1N1TB	1.1	B, C, S	8	100	10,000	0.08	380
WLCM1005Z0□1N2TB	1.2	B, C, S	8	100	10,000	0.09	380
WLCM1005Z0□1N3TB	1.3	B, C, S	8	100	10,000	0.09	380
WLCM1005Z0□1N5TB	1.5	B, C, S	8	100	10,000	0.10	380
WLCM1005Z0□1N6TB	1.6	B, C, S	8	100	10,000	0.10	380
WLCM1005Z0□1N8TB	1.8	B, C, S	8	100	10,000	0.12	380
WLCM1005Z0□2N0TB	2.0	B, C, S	8	100	10,000	0.12	380
WLCM1005Z0□2N2TB	2.2	B, C, S	8	100	10,000	0.13	380
WLCM1005Z0□2N4TB	2.4	B, C, S	8	100	10,000	0.13	380
WLCM1005Z0□2N7TB	2.7	B, C, S	8	100	6,000	0.16	380
WLCM1005Z0□3N0TB	3.0	B, C, S	8	100	6,000	0.16	380
WLCM1005Z0□3N3TB	3.3	B, C, S	8	100	6,000	0.16	300
WLCM1005Z0□3N6TB	3.6	B, C, S	8	100	6,000	0.20	300
WLCM1005Z0□3N9TB	3.9	B, C, S	8	100	6,000	0.20	300
WLCM1005Z0□4N3TB	4.3	B, C, S	8	100	6,000	0.20	300
WLCM1005Z0□4N7TB	4.7	B, C, S	8	100	6,000	0.20	300
WLCM1005Z0□5N1TB	5.1	B, C, S	8	100	5,300	0.23	300
WLCM1005Z0□5N6TB	5.6	B, C, S	8	100	4,500	0.23	300
WLCM1005Z0□6N2TB	6.2	B, C, S	8	100	4,500	0.25	300
WLCM1005Z0□6N8TB	6.8	G, H, J	8	100	4,500	0.25	300
WLCM1005Z0□7N5TB	7.5	G, H, J	8	100	4,200	0.28	300
WLCM1005Z0□8N2TB	8.2	G, H, J	8	100	3,700	0.28	300
WLCM1005Z0□9N1TB	9.1	G, H, J	8	100	3,400	0.30	300
WLCM1005Z0□10NTB	10	G, H, J	8	100	3,400	0.30	300
WLCM1005Z0□12NTB	12	G, H, J	8	100	3,000	0.45	300
WLCM1005Z0□13NTB	13	G, H, J	8	100	3,000	0.50	300
WLCM1005Z0□15NTB	15	G, H, J	8	100	2,500	0.55	300
WLCM1005Z0□18NTB	18	G, H, J	8	100	2,200	0.65	300
WLCM1005Z0□22NTB	22	G, H, J	8	100	1,900	0.70	300
WLCM1005Z0□24NTB	24	G, H, J	8	100	1,700	0.70	300
WLCM1005Z0□27NTB	27	G, H, J	8	100	1,700	0.80	300
WLCM1005Z0□33NTB	33	G, H, J	8	100	1,600	0.90	200
WLCM1005Z0□39NTB	39	G, H, J	8	100	1,200	1.00	200
WLCM1005Z0□47NTB	47	G, H, J	8	100	1,100	1.10	200
WLCM1005Z0□56NTB	56	G, H, J	8	100	1,000	1.10	200
WLCM1005Z0□68NTB	68	G, H, J	8	100	800	1.20	200

Electrical Specification (continuous)

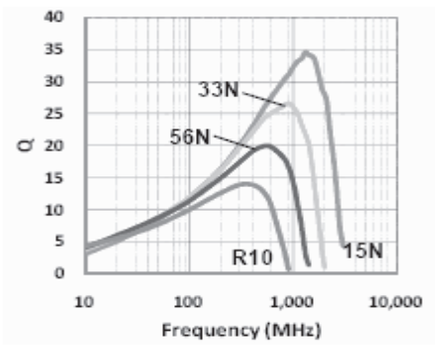
Walsin Part Number	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF (MHz)	RDC (Ω)	Rated Current (mA) Max.
					Min.	Max.	
WLCM1005Z0□82NTB	82	H, J	8	100	600	1.30	200
WLCM1005Z0□R10TB	100	J	8	100	600	1.60	200
WLCM1005Z0□R12TB	120	J	8	100	600	1.60	150
WLCM1005Z0□R15TB	150	J	8	100	550	3.20	140
WLCM1005Z0□R18TB	180	J	8	100	500	3.70	130
WLCM1005Z0□R22TB	220	J	8	100	450	4.20	120
WLCM1005Z0□R27TB	270	J	8	100	400	4.80	110

Operating Temperature range: -55℃ to 125℃

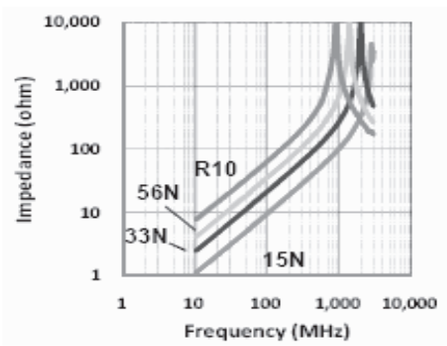
Typical Electrical Characteristic



1005 L vs. Frequency



1005 Q vs. Frequency



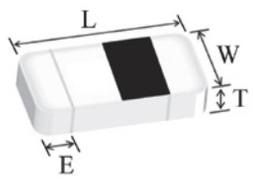
1005 Z vs. Frequency

Multi-Layer High Frequency Inductor WQCM1608 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQCM1608



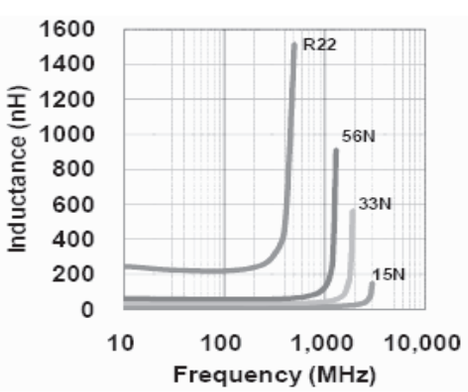
WQCM Series	L	W	T	E (Min/Max)
WQCM1608 (EIA 0603)	1.60±0.15	0.80±0.15	0.80±0.15	0.20~0.60

Electrical Specification

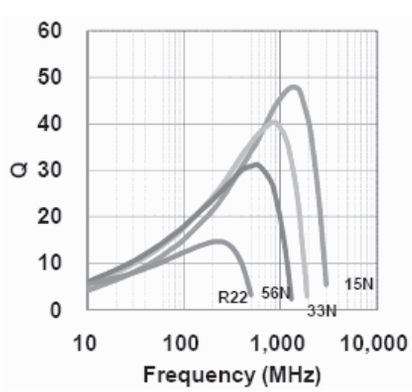
Walsin Part Number	Inductance (nH)	Tolerance	Q (Min.)	Freq. (MHz)	DCR (Ω) Max.	S.R.F (MHz) Min.	Rated Current (mA) Max.
WQCM1608A0□1N0TB	1.0	B, S	8	100	0.05	10,000	1,000
WQCM1608A0□1N2TB	1.2		8	100	0.05	10,000	1,000
WQCM1608A0□1N5TB	1.5		8	100	0.10	10,000	1,000
WQCM1608A0□1N8TB	1.8		8	100	0.10	10,000	1,000
WQCM1608A0□2N2TB	2.2		8	100	0.10	8,000	1,000
WQCM1608A0□2N7TB	2.7		10	100	0.13	7,000	1,000
WQCM1608A0□3N3TB	3.3		10	100	0.13	6,000	1,000
WQCM1608A0□3N9TB	3.9		10	100	0.15	6,000	1,000
WQCM1608A0□4N7TB	4.7		10	100	0.20	5,000	1,000
WQCM1608A0□5N6TB	5.6		10	100	0.23	4,000	600
WQCM1608A0□6N8TB	6.8	G , J	10	100	0.25	4,000	600
WQCM1608A0□8N2TB	8.2		10	100	0.28	3,500	600
WQCM1608A0□10NTB	10		12	100	0.30	3,400	600
WQCM1608A0□12NTB	12		12	100	0.35	2,600	600
WQCM1608A0□15NTB	15		12	100	0.40	2,300	600
WQCM1608A0□18NTB	18		12	100	0.45	2,000	600
WQCM1608A0□22NTB	22		12	100	0.50	1,600	600
WQCM1608A0□27NTB	27		12	100	0.55	1,400	600
WQCM1608A0□33NTB	33		12	100	0.60	1,200	600
WQCM1608A0□39NTB	39		12	100	0.65	1,100	500
WQCM1608A0□47NTB	47		12	100	0.70	900	500
WQCM1608A0□56NTB	56		12	100	0.75	900	500
WQCM1608A0□68NTB	68		12	100	0.85	700	400
WQCM1608A0□82NTB	82		12	100	0.95	600	300
WQCM1608A0□R10TB	100	J	12	100	1.00	600	300
WQCM1608A0□R12TB	120		8	50	1.20	500	300
WQCM1608A0□R15TB	150		8	50	1.20	500	300
WQCM1608A0□R18TB	180		8	50	1.30	400	300
WQCM1608A0□R20TB	200		8	50	1.50	400	300
WQCM1608A0□R22TB	220		8	50	1.50	400	300
WQCM1608A0□R27TB	270		8	50	1.90	400	200
WQCM1608A0□R33TB	330		8	50	2.10	350	200
WQCM1608A0□R39TB	390		8	50	2.30	350	150
WQCM1608A0□R47TB	470		8	50	2.60	300	150

Operating Temperature range: -55℃ to 125℃

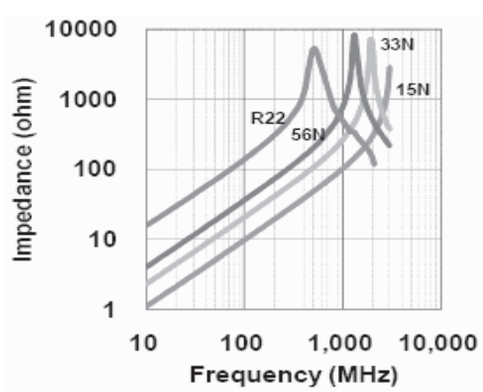
Typical Electrical Characteristic



1608 L vs. Frequency



1608 Q vs. Frequency



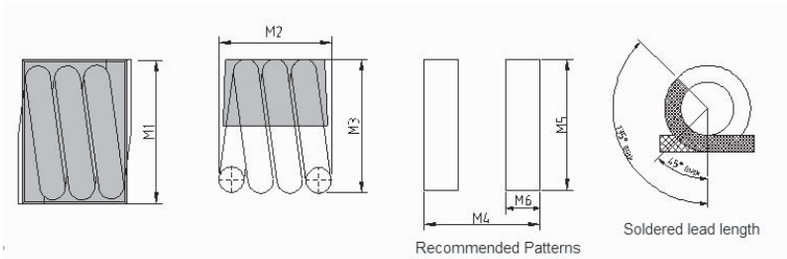
1608 Z vs. Frequency

SMD Air Wound Coil WLAC29B Series

Mechanical Dimensions

(Unit: mm)

WLAC29B



Dimension and Land Pattern

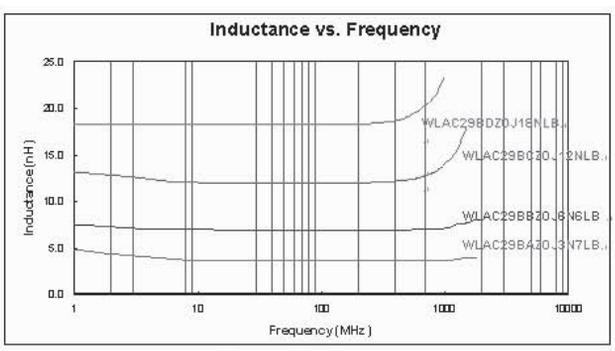
(Unit: mm)

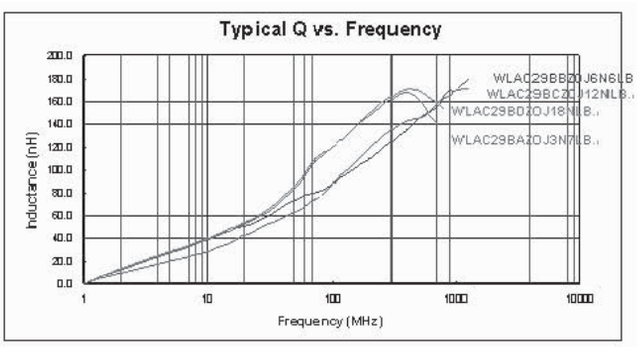
PART NO.	M1	M2	M3	M4	M5	M6
WLAC29BAZ0J3N7LB	5.71 MAX.	4.70 MAX.	5.33 MAX.	4.572	5.84	1.524
WLAC29BBZ0J6N6LB	5.46 MAX.	4.45 MAX.	4.95 MAX.	4.572	5.84	1.524
WLAC29BCZ0J12NLB	5.46 MAX.	4.96 MAX.	4.95 MAX.	5.207	5.84	1.524
WLAC29BDZ0J18NLB	5.59 MAX.	5.84 MAX.	4.95 MAX.	5.969	5.84	1.524

Electrical Specification

PART NO.	Inductance(nH) ±5%	Q TYP.	SRF TYP.(GHz)	DCR (mOHM) MAX.	Irms (A)
WLAC29BAZ0J3N7LB	3.7	100	17.5	2.0	7.0
WLAC29BBZ0J6N6LB	6.6	100	4.0	2.0	7.0
WLAC29BCZ0J12NLB	12.0	140	2.4	2.0	7.0
WLAC29BDZ0J18NLB	17.5	140	2.2	2.0	7.0

Typical Electrical Characteristic



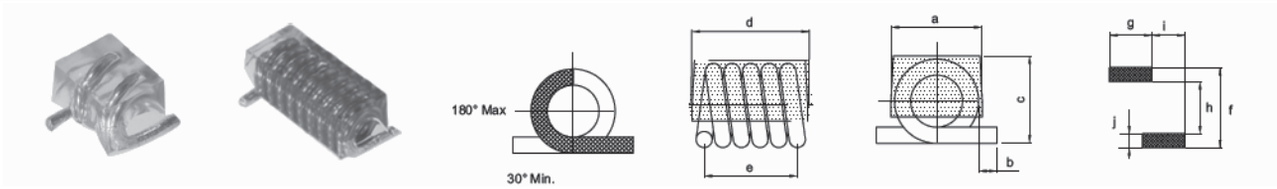


SMD Air Wound Coil WLAC291 Series

Mechanical Dimensions

(Unit: mm)

WLAC291A WLAC291B



Recommend Pattern

Dimension and Land Pattern

(Unit: mm)

Series	a	b	c	d	e	f	g	h	i	j
WLAC291A	3.05 (Max.)	0.58±0.38	3.18 (Max.)	3.68 (Max.)	2.92±0.25	4.19	3.30	1.65	2.79	1.27
WLAC291B	3.05 (Max.)	0.58±0.38	3.18 (Max.)	6.86 (Max.)	5.84±0.25	7.24	3.30	4.70	2.79	1.27

Electrical Specification

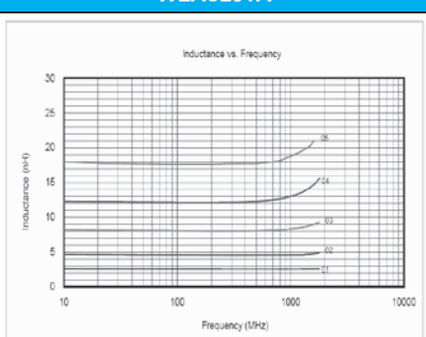
Part Number	Turns	Tolerance	Inductance (nH)	Q (Min.)	Test Freq' (MHz)	DCR (mΩ) Max.	SRF (GHz) Min.	Rated Current (A) Max.
WLAC291AZ0□T01PB	1	K	2.5	145	150	1.1	12.5	4.0
WLAC291AZ0□T02PB	2	G, J	5.0	140	150	1.8	6.5	4.0
WLAC291AZ0□T03PB	3	G, J	8.0	140	150	2.6	5.0	4.0
WLAC291AZ0□T04PB	4	G, J	12.5	137	150	3.4	3.3	4.0
WLAC291AZ0□T05PB	5	G, J	18.5	132	150	3.9	2.5	4.0
WLAC291BZ0□T06PB	6	G, J	17.5	100	150	4.5	2.2	4.0
WLAC291BZ0□T07PB	7	G, J	22.0	102	150	5.2	2.1	4.0
WLAC291BZ0□T08PB	8	G, J	28.0	105	150	6.0	1.8	4.0
WLAC291BZ0□T09PB	9	G, J	35.5	112	150	6.8	1.5	4.0
WLAC291BZ0□T10PB	10	G, J	43.0	106	150	7.9	1.2	4.0

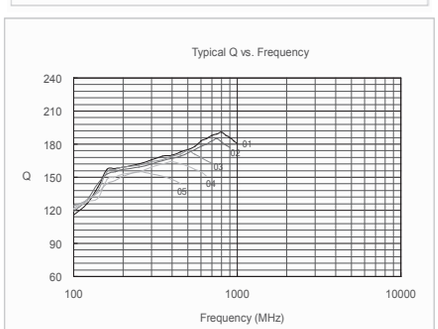
TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT:
HP4291B, HP8753E, CHROMA16502

NOTE:
1. Inductance & SRF measured on the HP4291B.
2. Operating temp. : -40℃ to +125℃
3. For temperature rise: 15℃
4. SRF measured using the HP8753E
5. MSL: LEVEL 1

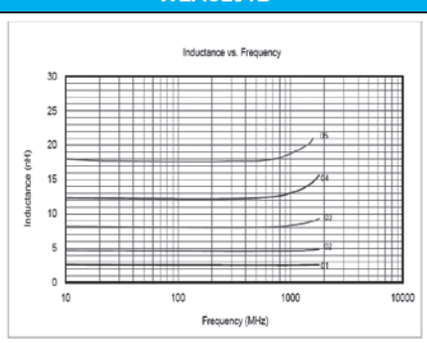
Characteristic Curve

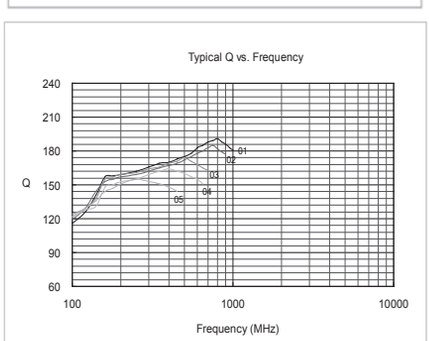
WLAC291A





WLAC291B



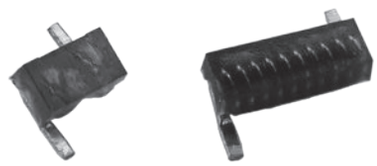


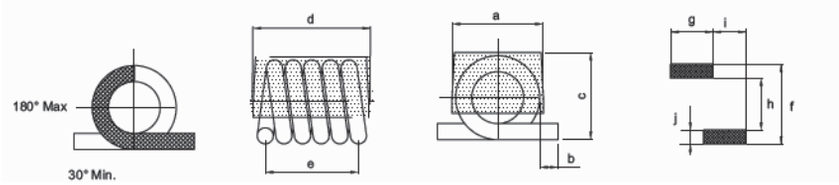
SMD Air Wound Coil WLAC292 Series

Mechanical Dimensions

(Unit: mm)

WLAC292A WLAC292B





Recommend Pattern

Series	a	b	c	d	e
WLAC292AR	1.42±0.13	0.89±0.25	1.37±0.15	1.83±0.25	2.21±0.25
WLAC292BR	1.42±0.13	0.89±0.25	1.37±0.15	3.66±0.30	4.04±0.30

Land Pattern

(Unit: mm)

Series	f	g	h	i	j
WLAC292AR	2.65	2.46	1.04	1.02	0.79
WLAC292BR	4.45	2.46	2.87	1.02	0.79

Electrical Specification

Part Number	Turns	L (nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF Maximum (GHz)	RDC Maximum (mΩ)	Rated Current Maximum (A)
WLAC292AZ0□T02PB	2	1.65	K	100	800	10	4	1.6
WLAC292AZ0□T03PB	3	2.55	J, K	100	800	8.2	5	1.6
WLAC292AZ0□T04PB	4	3.85	G, J, K	100	800	7.5	6	1.6
WLAC292AZ0□T05PB	5	5.4	G, J	100	800	7	8	1.6
WLAC292BZ0□T06PB	6	5.6	G, J	100	800	6.5	9	1.6
WLAC292BZ0□T07PB	7	7.15	G, J	100	800	6	10	1.6
WLAC292BZ0□T08PB	8	8.8	G, J	100	800	6	12	1.6
WLAC292BZ0□T09PB	9	9.85	G, J	100	800	5.2	13	1.6
WLAC292BZ0□T10PB	10	12.55	G, J	100	800	4.6	14	1.6

TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT: HP4291B, HP8753E, CHROMA16502

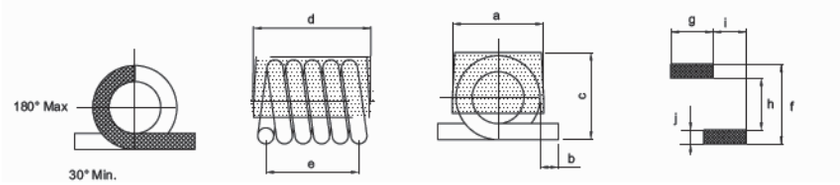
NOTE:
1. Inductance & SRF measured on the HP4291B.
2. Operating temp.: -40℃ to +125℃
3. For temperature rise: 15℃
4. SRF measured using the HP8753E
5. MSL: LEVEL 1

SMD Air Wound Coil WLAC293 Series

Mechanical Dimensions

(Unit: mm)

WLAC293A



Recommend Pattern

Series	a	b	c	d	e
WLAC293A	3.81(Max)	1.53±0.39	4.2 (Max.)	4.83(Max.)	4.32±0.39

Land Pattern

(Unit: mm)

Series	f	g	h	i	j
WLAC293A	5.8	5.16	2.85	2.62	1.48

Electrical Specification

Part Number	L (nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF Maximum (GHz)	RDC Maximum (mΩ)	Rated Current Maximum (A)
WLAC293AZ0□22NLB	22	G, J, K	100	150	3.2	4.2	3.0
WLAC293AZ0□27NLB	27	G, J, K	100	150	2.7	4.0	3.5
WLAC293AZ0□33NLB	33	G, J, K	100	150	2.5	4.8	3.0
WLAC293AZ0□39NLB	39	G, J, K	100	150	2.1	4.4	3.0
WLAC293AZ0□47NLB	47	G, J, K	100	150	2.1	5.6	3.0
WLAC293AZ0□56NLB	56	G, J, K	100	150	1.5	6.2	3.0
WLAC293AZ0□68NLB	68	G, J, K	100	150	1.5	8.2	2.5
WLAC293AZ0□82NLB	82	G, J, K	100	150	1.3	9.4	2.5
WLAC293AZ0□R10LB	100	G, J, K	100	150	1.2	12.3	1.7
WLAC293AZ0□R12LB	120	G, J, K	100	150	1.1	17.3	1.5

TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT: HP4291B, HP8753E, CHROMA16502

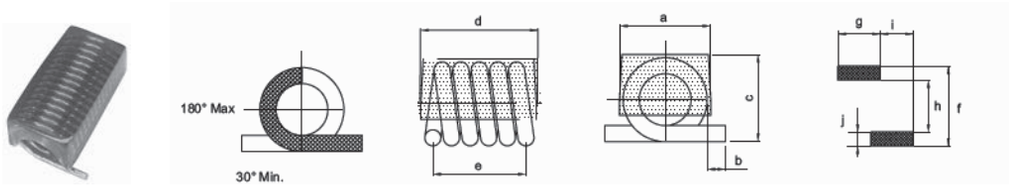
NOTE:
1. Inductance & SRF measured on the HP4291B.
2. Operating temp.: -40℃ to +125℃
3. For temperature rise: 15℃
4. SRF measured using the HP8753E
5. MSL: LEVEL 1

SMD Air Wound Coil WLAC294 Series

Mechanical Dimensions

(Unit: mm)

WLAC294A



Recommend Pattern

Series	a	b	c	d	e
WLAC294A	6.35(Max)	1.02 ±0.39	5.9(Max)	10.55(Max.)	7.98±0.51

Land Patter

(Unit: mm)

Series	f	g	h	i	j
WLAC294A	10	4.7	5.95	2.42	2.04

Electrical Specification

Part Number	Turns	L (nH)	Tolerance	Q Min	Q Min @ Freq (MHz)	SRF Maximum (MHz)	RDC Maximum (mΩ)	Rated Current Maximum (A)
WLAC294AZ0□T09LB	9	90	G, J, K	95	50	1140	15	3.5
WLAC294AZ0□T10LB	10	111	G, J, K	87	50	1020	15	3.5
WLAC294AZ0□T11LB	11	130	G, J, K	87	50	900	20	3.0
WLAC294AZ0□T12LB	12	169	G, J, K	95	50	875	25	3.0
WLAC294AZ0□T13LB	13	206	G, J, K	95	50	800	30	3.0
WLAC294AZ0□T14LB	14	222	G, J, K	92	50	730	35	3.0
WLAC294AZ0□T15LB	15	246	G, J, K	95	50	685	35	3.0
WLAC294AZ0□T16LB	16	307	G, J, K	95	50	660	35	3.0
WLAC294AZ0□T17LB	17	380	G, J, K	95	50	590	50	2.5
WLAC294AZ0□T18LB	18	422	G, J, K	95	50	540	60	2.5
WLAC294AZ0□T19LB	19	491	G, J, K	95	50	535	65	2.0
WLAC294AZ0□T20LB	20	538	G, J, K	87	50	490	90	2.0

TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT: HP4291B, FIXTURE HP16193A, HP8753E, CHROMA16502

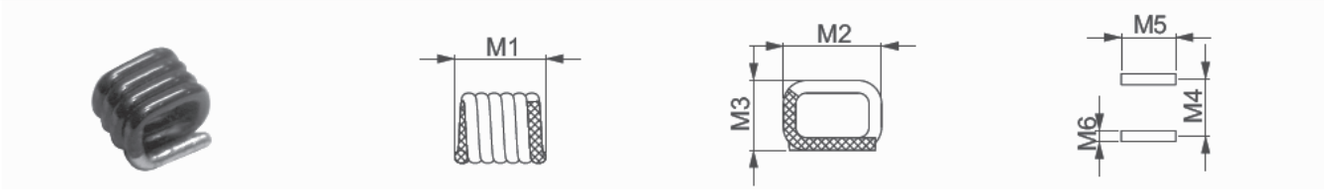
NOTE:
1. Inductance & SRF measured on the HP4291B. With HP16193 test fixture.
2. Operating temp.: -40℃ to +125℃
3. For temperature rise: 15℃
4. SRF measured using the HP8753E
5. MSL: LEVEL 1

SMD Square Air Wound Coil WLQC0806 Series

Mechanical Dimensions

(Unit: mm)

WLQC0806



Recommend Pattern

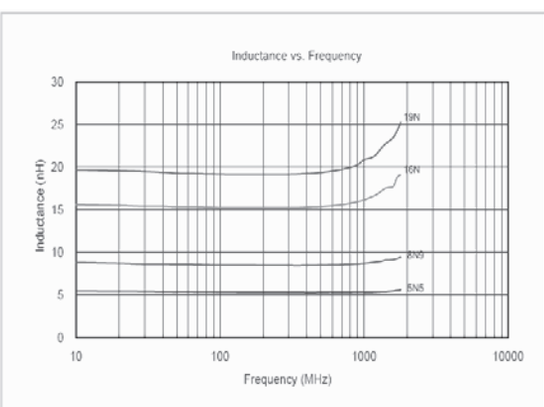
Part Number	M1	M2	M3	M4	M5	M6
WLQC0806Z0□5N5PB	1.346±0.102	1.829±0.254	1.397±0.102	0.962	2.6	0.51
WLQC0806Z0□6N0PB	1.295±0.102	1.829±0.254	1.397±0.102	1.020	2.6	0.51
WLQC0806Z0□8N9PB	1.626±0.152	1.829±0.254	1.397±0.102	1.320	2.6	0.51
WLQC0806Z0□12NPB	1.930±0.152	1.829±0.254	1.397±0.102	1.630	2.6	0.51
WLQC0806Z0□16NPB	2.286±0.152	1.829±0.254	1.397±0.102	1.960	2.6	0.51
WLQC0806Z0□19NPB	2.591±0.152	1.829±0.254	1.397±0.102	2.290	2.6	0.51

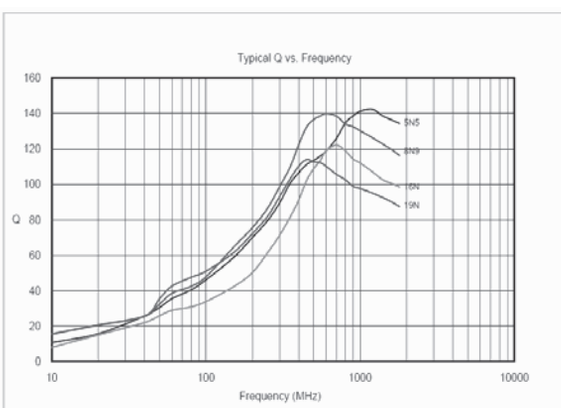
Electrical Specification

Part Number	Turns	Tolerance	Inductance (nH)	Q Min.	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Typ.	Rated Current (A) Max.
WLQC0806Z0□5N5PB	3	G, J	5.5	60	400	3.4	4.9	2.9
WLQC0806Z0□6N0PB	3	G, J	6.0	64	400	6.0	5.2	2.9
WLQC0806Z0□8N9PB	4	G, J	8.9	90	400	7.0	4.3	2.9
WLQC0806Z0□12NPB	5	G, J	12.3	90	400	8.0	4.8	2.9
WLQC0806Z0□16NPB	6	G, J	15.7	90	400	9.0	4.4	2.9
WLQC0806Z0J19NPB	7	G, J	19.4	90	400	10.0	4.0	2.9

Tolerance: J: ±5%, G: ±2%
Inductance & Q measured on the HP4291B. With HP16193A test fixture.
SRF measured using the HP8753E
Operating temperature range: -40℃ to +125℃.
Storage temperature Component: -40℃ to +145℃, Packaging: -40℃. TO +80℃
Electrical specifications at 25℃.
MSL: LEVEL 1

Characteristic Curve



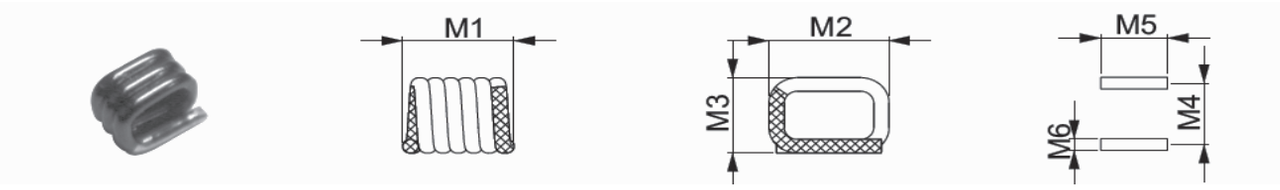


SMD Square Air Wound Coil WLQC0807 Series

Mechanical Dimensions

(Unit: mm)

WLQC0807



Recommend Pattern

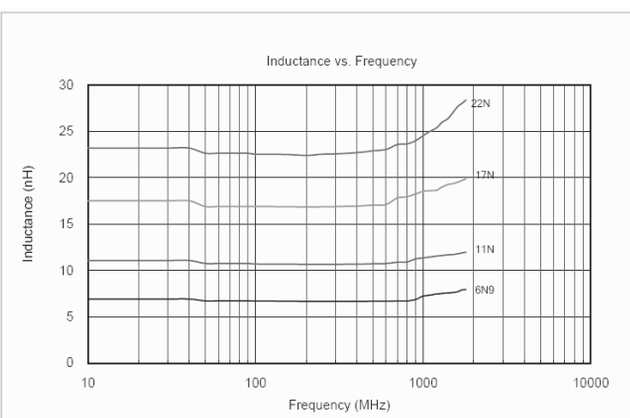
Part Number	M1	M2	M3	M4	M5	M6
WLQC0807Z0□6N9PB	1.295±0.102	1.829±0.254	1.524±0.254	1.02	2.6	0.51
WLQC0807Z0□10NPB	1.626±0.102	1.829±0.254	1.524±0.254	1.32	2.6	0.51
WLQC0807Z0□11NPB	1.549±0.152	1.829±0.254	1.524±0.254	1.24	2.6	0.51
WLQC0807Z0□14NPB	1.930±0.152	1.829±0.254	1.524±0.254	1.63	2.6	0.51
WLQC0807Z0□17NPB	2.286±0.152	1.829±0.254	1.524±0.254	1.96	2.6	0.51
WLQC0807Z0□22NPB	2.591±0.152	1.829±0.254	1.524±0.254	2.29	2.6	0.51

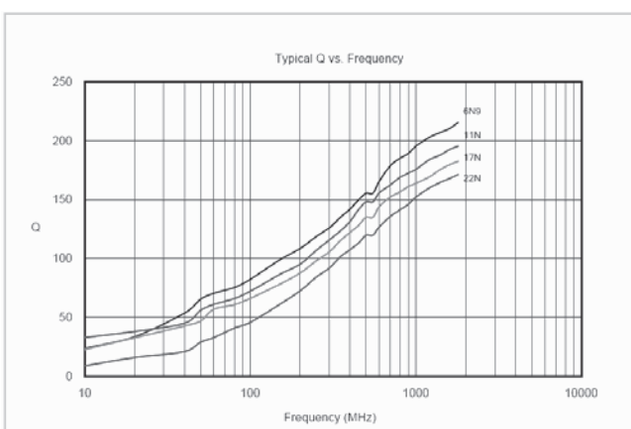
Electrical Specification

Part Number	Turns	Tolerance	Inductance (nH)	Q Min.	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Typ.	Rated Current (A) Max.
WLQC0807Z0□6N9PB	3	G, J	6.9	100	400	6.0	4.6	2.7
WLQC0807Z0□10NPB	4	G, J	10.2	100	400	7.0	4.0	2.7
WLQC0807Z0□11NPB	4	G, J	11.2	90	400	6.3	3.6	2.7
WLQC0807Z0□14NPB	5	G, J	13.7	100	400	8.0	4.3	2.7
WLQC0807Z0□17NPB	6	G, J	17.0	100	400	9.0	4.0	2.7
WLQC0807Z0□22NPB	7	G, J	22.0	100	400	10.0	3.5	2.7

Tolerance: J: ±5%, G: ±2%
Inductance & Q measured on the HP4291B. With HP16193A test fixture.
SRF measured using the HP8753E
Operating temperature range: -40℃ to +125℃.
Storage temperature Component: -40℃ to +145℃, Packaging: -40℃. TO +80℃
Electrical specifications at 25℃.
MSL: LEVEL 1

Characteristic Curve



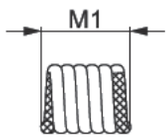


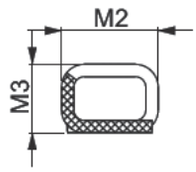
SMD Square Air Wound Coil WLQC0908 Series

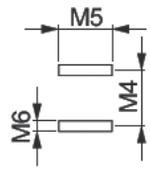
Mechanical Dimensions

(Unit: mm)

WLQC0908







Recommend Pattern

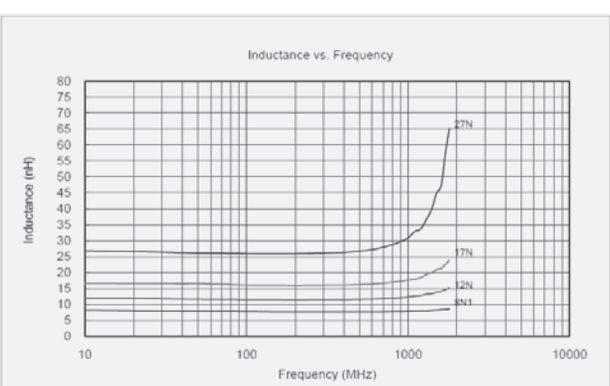
Part Number	M1	M2	M3	M4	M5	M6
WLQC0908Z0□8N1PB	1.473±0.152	2.134±0.152	1.829±0.152	1.12	2.8	0.64
WLQC0908Z0□12NPB	1.854±0.152	2.134±0.152	1.829±0.152	1.45	2.8	0.64
WLQC0908Z0□15NPB	1.549±0.152	2.134±0.152	1.829±0.152	1.24	2.8	0.64
WLQC0908Z0□17NPB	2.210±0.152	2.134±0.152	1.829±0.152	1.83	2.8	0.64
WLQC0908Z0□22NPB	2.565±0.152	2.134±0.152	1.829±0.152	2.18	2.8	0.64
WLQC0908Z0□23NPB	2.235±0.152	2.134±0.152	1.829±0.152	1.90	2.8	0.64
WLQC0908Z0□25NPB	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64
WLQC0908Z0□27NPB	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64

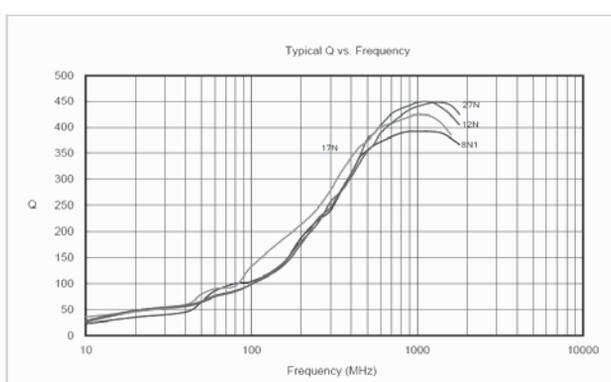
Electrical Specification

Part Number	Turns	Tolerance	Inductance (nH)	Q Min.	Test Freq (MHz)	DCR (mΩ) Max.	SRF (GHz) Typ.	Rated Current (A) Max.
WLQC0908Z0□8N1PB	3	G, J	8.1	130	400	6.0	5.2	4.4
WLQC0908Z0□12NPB	4	G, J	12.1	130	400	7.0	4.3	4.4
WLQC0908Z0□15NPB	4	G, J	14.7	90	400	7.2	3.0	4.4
WLQC0908Z0□17NPB	5	G, J	16.6	130	400	8.0	3.4	4.4
WLQC0908Z0□22NPB	6	G, J	21.5	130	400	9.0	3.7	4.4
WLQC0908Z0□23NPB	6	G, J	23.0	130	400	10.0	2.6	4.4
WLQC0908Z0□25NPB	7	G, J	25.0	130	400	10.0	2.5	4.4
WLQC0908Z0□27NPB	7	G, J	27.3	130	400	10.0	3.2	4.4

Tolerance: J: ±5%, G: ±2%
Inductance & Q measured on the HP4291B. With HP16193A test fixture.
SRF measured using the HP8753E
Operating temperature range: -40℃ to +125℃.
Storage temperature Component:-40℃ to +145℃, Packaging: -40℃. TO +80℃
Electrical specifications at 25℃.
MSL: LEVEL 1

Characteristic Curve



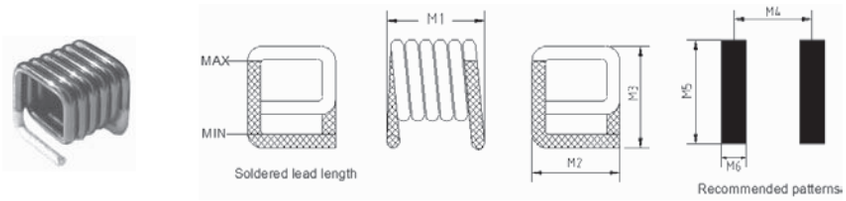


SMD Square Air Wound Coil WLQC1111 Series

Mechanical Dimensions

(Unit: mm)

WLQC1111



Part Number	M1	M2	M3	M4	M5	M6
WLQC1111H0□27NLB	2.67±0.254	2.67±0.127	2.79±0.127	2.29	3.05	1.02
WLQC1111H0□30NLB	2.67±0.254	2.67±0.127	2.79±0.127	2.29	3.05	1.02
WLQC1111H0□33NLB	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
WLQC1111H0□36NLB	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
WLQC1111H0□39NLB	2.92±0.254	2.67±0.127	2.79±0.127	2.54	3.05	1.02
WLQC1111H0□43NLB	3.30±0.254	2.67±0.127	2.79±0.127	2.79	3.05	1.02
WLQC1111H0□47NLB	3.30±0.254	2.67±0.127	2.79±0.127	2.79	3.05	1.02

Electrical Specification

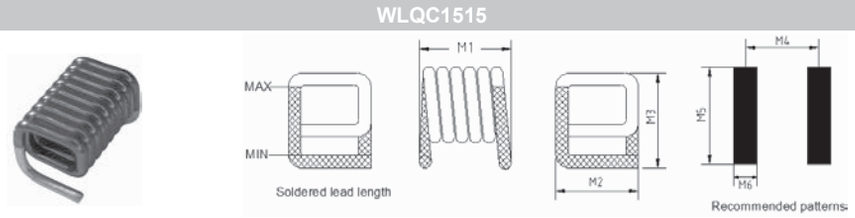
Part Number	Tolerance	L (nH)	Q (min)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz) Typ	Rated Current (A) Max
WLQC1111H0□27NLB	G, J	27	200	400	8.1	2.6	5.5
WLQC1111H0□30NLB	G, J	30	200	400	8.3	2.4	5.5
WLQC1111H0□33NLB	G, J	33	200	400	9.5	2.3	4.8
WLQC1111H0□36NLB	G, J	36	200	400	9.8	2.3	4.8
WLQC1111H0□39NLB	G, J	39	200	400	10.0	2.2	4.8
WLQC1111H0□43NLB	G, J	43	200	400	10.8	2.2	4.4
WLQC1111H0□47NLB	G, J	47	200	400	11.3	2.2	4.4

SMD Square Air Wound Coil WLQC1515 Series

Mechanical Dimensions

(Unit: mm)

WLQC1515



Part Number	M1	M2	M3	M4	M5	M6
WLQC1515H0□47NLB	4.06±0.254	3.56±0.178	3.73±0.178	3.56	4.45	1.78
WLQC1515H0□68NLB	5.33±0.254	3.56±0.178	3.73±0.178	4.83	4.45	1.78
WLQC1515H0□82NLB	5.84±0.254	3.56±0.178	3.73±0.178	5.33	4.45	1.78

Electrical Specification

Part Number	Tolerance	L (nH)	Q (min)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Typ	Rated Current (A) Max
WLQC1515H0□47NLB	G, J	27	230	400	6.35	1.87	4.9
WLQC1515H0□68NLB	G, J	30	230	400	8.60	2.13	5.5
WLQC1515H0□82NLB	G, J	33	230	400	9.40	1.79	5.6

TEST INSTRUMENT: HP4291B / FIXTURE HP16193A

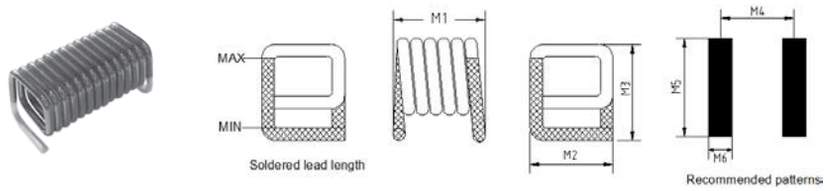
NOTE:
Inductance & Q measured on the HP4291B. With HP16193A test fixture.
Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
Storage temperature Component: -40℃. TO +145℃, Packaging: -40℃. TO +80℃.
SRF measured using an Agilent/HP 8753 network analyzer.
Current that causes a 20℃ temperature rise from 25℃ ambient.
Tolerance: G=2%, J=5%
MSL: LEVEL 1

SMD Square Air Wound Coil WLQC2222 Series

Mechanical Dimensions

(Unit: mm)

WLQC2222



Part Number	M1	M2	M3	M4	M5	M6
WLQC2222H0□90NLB	5.21±0.381	5.46±0.254	5.69±0.254	4.70	6.35	2.16
WLQC2222H0□R11LB	6.35±0.381	5.59±0.254	5.69±0.254	5.84	6.73	2.16
WLQC2222H0□R13LB	6.73±0.381	5.59±0.254	5.69±0.254	6.22	6.73	2.16
WLQC2222H0□R16LB	7.37±0.381	5.59±0.254	5.69±0.254	6.60	6.73	2.16
WLQC2222H0□R18LB	8.13±0.381	5.59±0.254	5.69±0.254	7.37	6.73	2.16
WLQC2222H0□R22LB	9.91±0.381	5.59±0.254	5.69±0.254	9.14	6.73	2.16
WLQC2222H0□R27LB	11.68±0.381	5.59±0.254	5.69±0.254	10.67	6.73	2.16
WLQC2222H0□R30LB	11.94±0.381	5.72±0.254	5.69±0.254	11.18	6.73	2.16

Electrical Specification

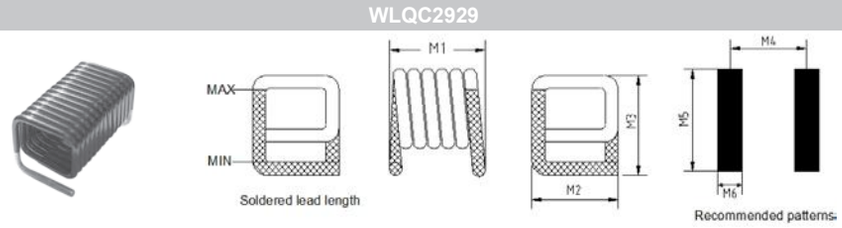
Part Number	Tolerance	L (nH)	Q (Typ)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Min	Rated Current (A) Max
WLQC2222H0□90NLB	G, J	90	140	50	5.50	1.15	5.0
WLQC2222H0□R11LB	G, J	110	140	50	6.50	1.00	5.7
WLQC2222H0□R13LB	G, J	130	140	50	7.50	1.00	5.4
WLQC2222H0□R16LB	G, J	160	140	50	8.25	1.00	5.7
WLQC2222H0□R18LB	G, J	180	140	50	9.50	1.10	5.0
WLQC2222H0□R22LB	G, J	220	140	50	11.0	1.00	5.0
WLQC2222H0□R27LB	G, J	270	140	50	12.5	0.80	4.3
WLQC2222H0□R30LB	G, J	300	150	50	13.8	0.72	3.7

SMD Square Air Wound Coil WLQC2929 Series

Mechanical Dimensions

(Unit: mm)

WLQC2929



Part Number	M1	M2	M3	M4	M5	M6
WLQC2929H0□R33LB	10.29±0.381	7.49±0.254	7.24±0.254	9.53	8.26	2.29
WLQC2929H0□R36LB	11.30±0.381	7.49±0.254	7.24±0.254	10.541	8.26	2.29
WLQC2929H0□R39LB	12.32±0.381	7.49±0.254	7.24±0.254	11.56	8.26	2.29
WLQC2929H0□R43LB	13.21±0.381	7.49±0.254	7.24±0.254	12.45	8.26	2.29
WLQC2929H0□R50LB	14.00±0.381	7.49±0.254	7.24±0.254	13.21	8.26	2.29

Electrical Specification

Part Number	Tolerance	L (nH)	Q (Typ)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Min	Rated Current (A) Max
WLQC2929H0□R33LB	G, J	330	180	50	12.5	0.660	4.7
WLQC2929H0□R36LB	G, J	360	180	50	13.5	0.620	4.5
WLQC2929H0□R39LB	G, J	390	180	50	14.5	0.590	4.4
WLQC2929H0□R43LB	G, J	430	180	50	15.5	0.550	4.2
WLQC2929H0□R50LB	G, J	500	180	50	16.5	0.500	4.3

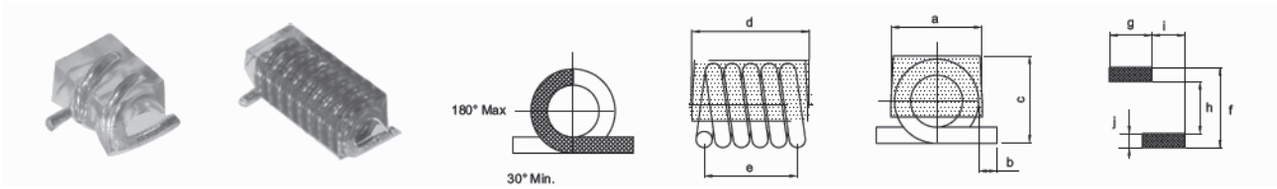
TEST INSTRUMENT: HP4291B/FIXTURE HP16193A
NOTE:
Inductance & Q measured on the HP4291B. With HP16193A test fixture.
Ambient temperature: -40℃ to +125℃ with Irms current, +125℃ to +145℃ with derated current.
Storage temperature Component: -40℃. TO +145℃, Packaging: -40℃. TO +80℃.
SRF measured using an Agilent/HP 8753 network analyzer.
Current that causes a 20℃ temperature rise from 25℃ ambient.
Tolerance: G=2%, J=5%

SMD Air Wound Coil WQAC291 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQAC291A WQAC291B



Recommend Pattern

Dimension and Land Pattern

(Unit: mm)

Series	a	b	c	d	e	f	g	h	i	j
WQAC291A	3.05 (Max.)	0.58±0.38	3.18 (Max.)	3.68 (Max.)	2.92±0.25	4.19	3.30	1.65	2.79	1.27
WQAC291B	3.05 (Max.)	0.58±0.38	3.18 (Max.)	6.86 (Max.)	5.84±0.25	7.24	3.30	4.70	2.79	1.27

Electrical Specification

Part Number	L(nH)	Tolerance	Turns	Q Min	Typical Q @ Frequency (MHz)	SRF Typical (GHz)	RDC Maximum (mΩ)	Rated Current (A)
WQAC291AZ0□T01PB	2.5	K	1	145	150	12.5	1.1	4.0
WQAC291AZ0□T02PB	5.0	G,J	2	140	150	6.5	1.8	4.0
WQAC291AZ0□T03PB	8.0	G,J	3	140	150	5.0	2.6	4.0
WQAC291AZ0□T04PB	12.5	G,J	4	137	150	3.3	3.4	4.0
WQAC291AZ0□T05PB	18.5	G,J	5	132	150	2.5	3.9	4.0
WQAC291BZ0□T06PB	17.5	G,J	6	100	150	2.2	4.5	4.0
WQAC291BZ0□T07PB	22.0	G,J	7	102	150	2.1	5.2	4.0
WQAC291BZ0□T08PB	28.0	G,J	8	105	150	1.8	6.0	4.0
WQAC291BZ0□T09PB	35.5	G,J	9	112	150	1.5	6.8	4.0
WQAC291BZ0□T10PB	43.0	G,J	10	106	150	1.2	7.9	4.0

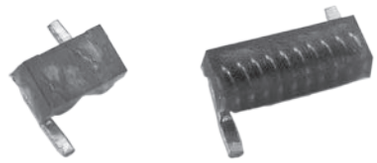
TOLERANCE: G = ±2%, J = ±5%, K = ±10%
L AND Q MEASURED AN AGILENT 4291B IMPEDANCE ANALYZER WITH AN AGILENT/HP16193A TEST FIXTURE.
SRF MEASURED USING AN AGILENT/HP 5071C NETWORK ANALYZER AND A PDC TEST FIXTURE.
DCR MESASURED USING A MICRO-OHMMETER.
CURRENT THAT CAUSES A 15°C TEMPERATURE RISE FROM 25°C AMBIENT.
ELECTRICAL SPECIFICATIONS AT 25°C.
OPERATING TEMPERATURE: -40℃ ~ +150℃
STORAGE TEMPERATURE COMPONENT: –40°C to +100°C. TAPE AND REEL PACKAGING: –40°C to +80°C.
MEAN TIME BETWEEN FAILURES (MTBF) 1 BILLION HOURS
MOISTURE SENSITIVITY LEVEL (MSL) 1 (UNLIMITED FLOOR LIFE AT < 30°C / 85% RELATIVE HUMIDITY)
GRAPHIC IS ONLY FOR DIMENSIONALLY APPLICATION.

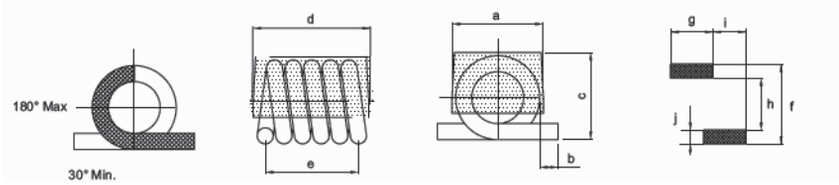
SMD Air Wound Coil WQAC292 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQAC292A WQAC292B





Recommend Pattern

Series	a	b	c	d	e
WQAC292AR	1.42±0.13	0.89±0.25	1.37±0.15	1.83±0.25	2.21±0.25
WQAC292BR	1.42±0.13	0.89±0.25	1.37±0.15	3.66±0.30	4.04±0.30

Land Pattern

(Unit: mm)

Series	f	g	h	i	j
WQAC292AR	2.65	2.46	1.04	1.02	0.79
WQAC292BR	4.45	2.46	2.87	1.02	0.79

Electrical Specification

Part Number	Turns	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF Maximum (GHz)	RDC Maximum (mΩ)	Rated Current Maximum (A)
WQAC292AZ0□T02PB	2	1.65	K	100	800	10	4	1.6
WQAC292AZ0□T03PB	3	2.55	J, K	100	800	8.2	5	1.6
WQAC292AZ0□T04PB	4	3.85	G, J, K	100	800	7.5	6	1.6
WQAC292AZ0□T05PB	5	5.4	G, J	100	800	7	8	1.6
WQAC292BZ0□T06PB	6	5.6	G, J	100	800	6.5	9	1.6
WQAC292BZ0□T07PB	7	7.15	G, J	100	800	6	10	1.6
WQAC292BZ0□T08PB	8	8.8	G, J	100	800	6	12	1.6
WQAC292BZ0□T09PB	9	9.85	G, J	100	800	5.2	13	1.6
WQAC292BZ0□T10PB	10	12.55	G, J	100	800	4.6	14	1.6

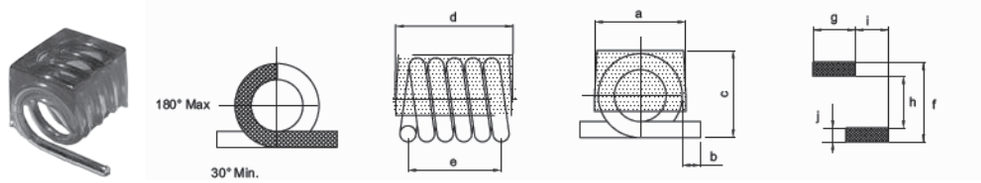
TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT: HP4291B, FIXTURE HP16193A, HP8753E, CHROMA16502
NOTE :
1. Inductance & Q measured on the HP4291B. With HP16193A test fixture.
2. SRF measured using the HP8753E
3. Operating temperature range: -40℃ to +125℃.
4. Electrical specifications at 25℃.
5. MSL: LEVEL 1

SMD Air Wound Coil WQAC293 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQAC293A



Recommend Pattern

Series	a	b	c	d	e
WQAC293A	3.81(Max)	1.53±0.39	4.2 (Max.)	4.83(Max.)	4.32±0.39

Land Pattern

(Unit: mm)

Series	f	g	h	i	j
WQAC293A	5.8	5.16	2.85	2.62	1.48

Electrical Specification

Part Number	L(nH)	Tolerance	Q Min	Typical Q @ Frequency (MHz)	SRF Maximum (GHz)	RDC Maximum (mΩ)	Rated Current Maximum (A)
WQAC293AZ0□22NLB	22	G, J, K	100	150	3.2	4.2	3.0
WQAC293AZ0□27NLB	27	G, J, K	100	150	2.7	4.0	3.5
WQAC293AZ0□33NLB	33	G, J, K	100	150	2.5	4.8	3.0
WQAC293AZ0□39NLB	39	G, J, K	100	150	2.1	4.4	3.0
WQAC293AZ0□47NLB	47	G, J, K	100	150	2.1	5.6	3.0
WQAC293AZ0□56NLB	56	G, J, K	100	150	1.5	6.2	3.0
WQAC293AZ0□68NLB	68	G, J, K	100	150	1.5	8.2	2.5
WQAC293AZ0□82NLB	82	G, J, K	100	150	1.3	9.4	2.5
WQAC293AZ0□R10LB	100	G, J, K	100	150	1.2	12.3	1.7
WQAC293AZ0□R12LB	120	G, J, K	100	150	1.1	17.3	1.5

TOLERANCE: G=±2%, J=±5%, K=±10%
※TEST INSTRUMENT: HP4291B, HP8753E, CHROMA16502
NOTE:
1. Inductance & SRF measured on the HP4291B.
2. Operating temp.: -40℃ to +125℃
3. For temperature rise: 15℃
4. SRF measured using the HP8753E
5. MSL: LEVEL 1

SMD Square Air Wound Coil WQQC0806 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQQC0806

Recommend Pattern

Part Number	M1	M2	M3	M4	M5	M6
WQQC0806Z0□5N5PB	1.346±0.102	1.829±0.254	1.397±0.102	0.962	2.6	0.51
WQQC0806Z0□6N0PB	1.295±0.102	1.829±0.254	1.397±0.102	1.020	2.6	0.51
WQQC0806Z0□8N9PB	1.626±0.152	1.829±0.254	1.397±0.102	1.320	2.6	0.51
WQQC0806Z0□12NPB	1.930±0.152	1.829±0.254	1.397±0.102	1.630	2.6	0.51
WQQC0806Z0□16NPB	2.286±0.152	1.829±0.254	1.397±0.102	1.960	2.6	0.51
WQQC0806Z0□19NPB	2.591±0.152	1.829±0.254	1.397±0.102	2.290	2.6	0.51

Electrical Specification

WQQC0806 Series	Turns	Tolerance	L (nH)	Q (min)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Typ	Rated Current (A) Max
WQQC0806Z0□5N5PB	3	J	5.5	60	400	3.4	4.9	2.9
WQQC0806Z0□6N0PB	3	J	6.0	64	400	6.0	5.2	2.9
WQQC0806Z0□8N9PB	4	J	8.9	90	400	7.0	4.3	2.9
WQQC0806Z0□12NPB	5	J	12.3	90	400	8.0	4.8	2.9
WQQC0806Z0□16NPB	6	J	15.7	90	400	9.0	4.4	2.9
WQQC0806Z0□19NPB	7	J	19.4	90	400	10.0	4.0	2.9

Tolerance: J: ±5%,
Land Q measured an agilent 4291B impedance analyzer with an agilent/HP16193A test fixture
SRF measured using an agilent/HP5071C network analyzer and a pdc test fixture
DCE mesasured using a micro-ohmmeter.

Current that causes at 15°C temperature rise from 25°C ambient.
Electrical specification at 25°C
Operating temperature:-40°C ~+150°C
Storage temperature component: –40°C to +100°C.
Tape and reel packing: -40°C to +80°C
Mean time between failures (MTBF) 1 Billion hours
MSL: Level 1(unlimted floor life at < 30°C / 85% relative humidity)

SMD Square Air Wound Coil WQQC0807 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WQQC0807

Recommend Pattern

Part Number	M1	M2	M3	M4	M5	M6
WQQC0807Z0□6N9PB	1.295±0.102	1.829±0.254	1.524±0.254	1.02	2.6	0.51
WQQC0807Z0□10NPB	1.626±0.102	1.829±0.254	1.524±0.254	1.32	2.6	0.51
WQQC0807Z0□11NPB	1.549±0.152	1.829±0.254	1.524±0.254	1.24	2.6	0.51
WQQC0807Z0□14NPB	1.930±0.152	1.829±0.254	1.524±0.254	1.63	2.6	0.51
WQQC0807Z0□17NPB	2.286±0.152	1.829±0.254	1.524±0.254	1.96	2.6	0.51
WQQC0807Z0□22NPB	2.591±0.152	1.829±0.254	1.524±0.254	2.29	2.6	0.51

Electrical Specification

WQQC0807 Series	Turns	Tolerance	L (nH)	Q (min)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Typ	Rated Current (A) Max
WQQC0807Z0□6N9PB	3	J	6.9	100	400	6.0	4.6	2.7
WQQC0807Z0□10NPB	4	J	10.2	100	400	7.0	4.0	2.7
WQQC0807Z0□11NPB	4	J	11.2	90	400	6.3	3.6	2.7
WQQC0807Z0□14NPB	5	J	13.7	100	400	8.0	4.3	2.7
WQQC0807Z0□17NPB	6	J	17.0	100	400	9.0	4.0	2.7
WQQC0807Z0□22NPB	7	J	22.0	100	400	10.0	3.5	2.7

Tolerance: J: ±5%,
Land Q measured an agilent 4291B impedance analyzer with an agilent/HP16193A test fixture
SRF measured using an agilent/HP5071C network analyzer and a pdc test fixture
DCE mesasured using a micro-ohmmeter.

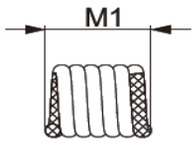
Current that causes at 15°C temperature rise from 25°C ambient.
Electrical specification at 25°C
Operating temperature: -40°C ~+150°C
Storage temperature component: -40°C to +100°C.
Tape and reel packing: -40°C to +80°C
Mean time between failures (MTBF) 1 Billion hours
MSL: Level 1(unlimted floor life at < 30°C / 85% relative humidity)

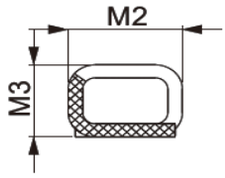
SMD Square Air Wound Coil WQQC0908 Series (AEC-Q200)

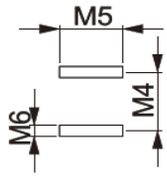
Mechanical Dimensions

(Unit: mm)

WQQC0908







Recommend Pattern

WQQC0908 Series	M1	M2	M3	M4	M5	M6
WQQC0908Z0□8N1PB	1.473±0.152	2.134±0.152	1.829±0.152	1.12	2.8	0.64
WQQC0908Z0□12NPB	1.854±0.152	2.134±0.152	1.829±0.152	1.45	2.8	0.64
WQQC0908Z0□15NPB	1.549±0.152	2.134±0.152	1.829±0.152	1.24	2.8	0.64
WQQC0908Z0□17NPB	2.210±0.152	2.134±0.152	1.829±0.152	1.83	2.8	0.64
WQQC0908Z0□22NPB	2.565±0.152	2.134±0.152	1.829±0.152	2.18	2.8	0.64
WQQC0908Z0□23NPB	2.235±0.152	2.134±0.152	1.829±0.152	1.90	2.8	0.64
WQQC0908Z0□25NPB	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64
WQQC0908Z0□27NPB	2.972±0.152	2.134±0.152	1.829±0.152	2.57	2.8	0.64

Electrical Specification

WQQC0908 Series	Turns	Tolerance	L (nH)	Q (min)	Test Freq (MHz)	DCR (mΩ)Max	SRF (GHz)Typ	Rated Current (A) Max
WQQC0908Z0□8N1PB	3	J	8.1	130	400	6.0	5.2	4.4
WQQC0908Z0□12NPB	4	J	12.1	130	400	7.0	4.3	4.4
WQQC0908Z0□15NPB	4	J	14.7	90	400	7.2	3.0	4.4
WQQC0908Z0□17NPB	5	J	16.6	130	400	8.0	3.4	4.4
WQQC0908Z0□22NPB	6	J	21.5	130	400	9.0	3.7	4.4
WQQC0908Z0□23NPB	6	J	23.0	130	400	10.0	2.6	4.4
WQQC0908Z0□25NPB	7	J	25.0	130	400	10.0	2.5	4.4
WQQC0908Z0□27NPB	7	J	27.3	130	400	10.0	3.2	4.4

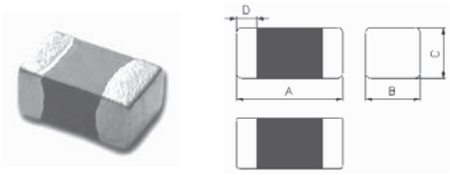
Tolerance: J: ±5%,
Land Q measured an agilent 4291B impedance analyzer with an agilent/HP16193A test fixture
SRF measured using an agilent/HP5071C network analyzer and a pdc test fixture
DCE mesasured using a micro-ohmmeter
Current that causes at 15°C temperature rise from 25°C ambient.
Electrical specification at 25°C
Operating temperature: -40°C ~ +150°C
Storage temperature component: -40°C to +100°C.
Tape and reel packing: -40°C to +80°C
Mean time between failures (MTBF) 1 Billion hours
MSL: Level 1(unlimted floor life at < 30°C / 85% relative humidity)

Ferrite Chip Inductor WLFI1608 Series

Mechanical Dimensions

(Unit: mm)

WLFI1608



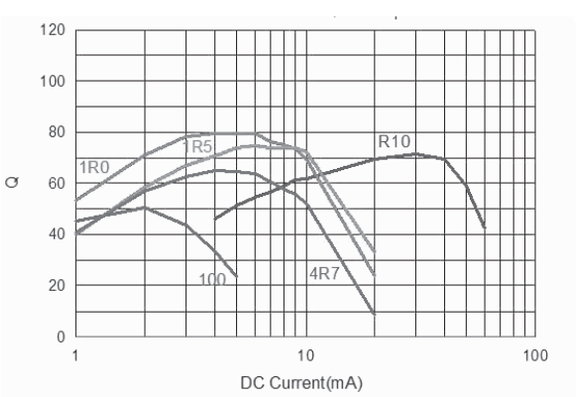
WLFI Series	A	B	C	D
WLFI1608 (EIA 0603)	1.60±0.15 mm	0.80±0.15 mm	0.80±0.15 mm	0.30±0.2 mm

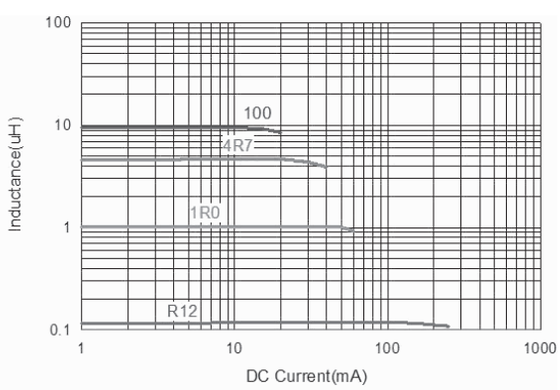
Electrical Specification

Walsin Part Number	L (uH)	Tolerance	Test Frequency (MHz)	Q (min.)	DC Resistance (Ω) max.	Rated Current (mA) max.	SRF (MHz) min.
WLFI1608Z0M47NTB	0.047	M	60mV / 50MHz	10 / 50MHz	0.30	50	260
WLFI1608Z0M68NTB	0.068	M	60mV / 50MHz	10 / 50MHz	0.30	50	250
WLFI1608Z0M82NTB	0.082	M	60mV / 50MHz	10 / 50MHz	0.30	50	245
WLFI1608Z0MR10TB	0.10	M	60mV / 25MHz	15 / 25MHz	0.50	50	240
WLFI1608Z0MR12TB	0.12	M	60mV / 25MHz	15 / 25MHz	0.50	50	205
WLFI1608Z0MR15TB	0.15	M	60mV / 25MHz	15 / 25MHz	0.60	50	180
WLFI1608Z0MR18TB	0.18	M	60mV / 25MHz	15 / 25MHz	0.60	50	165
WLFI1608Z0MR22TB	0.22	M	60mV / 25MHz	15 / 25MHz	0.80	50	150
WLFI1608Z0MR27TB	0.27	M	60mV / 25MHz	15 / 25MHz	0.80	50	136
WLFI1608Z0MR33TB	0.33	M	60mV / 25MHz	15 / 25MHz	0.85	35	125
WLFI1608Z0MR39TB	0.39	M	60mV / 25MHz	15 / 25MHz	1.00	35	110
WLFI1608Z0MR47TB	0.47	M	60mV / 25MHz	15 / 25MHz	1.35	35	105
WLFI1608Z0MR56TB	0.56	M	60mV / 25MHz	15 / 25MHz	1.55	35	95
WLFI1608Z0MR68TB	0.68	M	60mV / 25MHz	15 / 25MHz	1.70	35	80
WLFI1608Z0MR82TB	0.82	M	60mV / 25MHz	15 / 25MHz	2.10	35	75
WLFI1608Z0M1R0TB	1.0	M	60mV / 10MHz	30 / 10MHz	0.60	25	70
WLFI1608Z0M1R5TB	1.5	M	60mV / 10MHz	30 / 10MHz	0.80	25	55
WLFI1608Z0M1R8TB	1.8	M	60mV / 10MHz	30 / 10MHz	0.95	25	50
WLFI1608Z0M2R2TB	2.2	M	60mV / 10MHz	30 / 10MHz	1.15	15	45
WLFI1608Z0M3R3TB	3.3	M	60mV / 10MHz	30 / 10MHz	1.55	15	38
WLFI1608Z0M4R7TB	4.7	M	60mV / 10MHz	30 / 10MHz	2.10	15	33
WLFI1608Z0M100TB	10.0	M	60mV / 2MHz	30 / 2MHz	2.55	15	17

NOTE: TOLERANCE M=±20%

Characteristic Curve



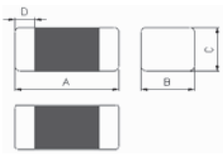


Ferrite Chip Inductor WLFI2012 Series

Mechanical Dimensions

(Unit: mm)

WLFI2012



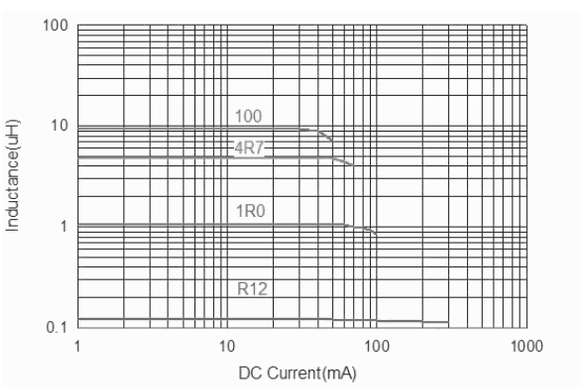
WLFI Series	A	B	Thickness C	D
WLFI2012 (EIA 0805)	2.00±0.mm	1,25±0.2 mm	0.85±0.20 mm 1.25±0.20 mm	0.50±0.30 mm

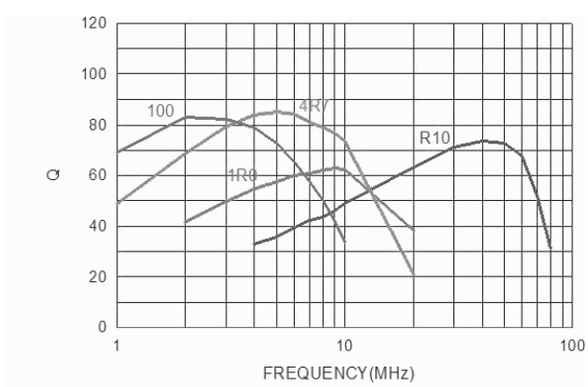
Electrical Specification

Walsin Part Number	L (uH)	Tolerance	Test Frequency (MHz)	Q (min.)	DC Resistance (Ω) max.	Rated Current (mA) max.	SRF (MHz) min.
WLFI2012Z0M47NTB	0.047	±20%	60mV / 50MHz	15 / 50MHz	0.20	300	320
WLFI2012Z0M68NTB	0.068	±20%	60mV / 50MHz	15 / 50MHz	0.20	300	280
WLFI2012Z0M82NTB	0.082	±20%	60mV / 50MHz	15 / 50MHz	0.20	300	255
WLFI2012Z0MR10TB	0.10	±20%	60mV / 25MHz	20 / 25MHz	0.30	250	235
WLFI2012Z0MR12TB	0.12	±20%	60mV / 25MHz	20 / 25MHz	0.30	250	220
WLFI2012Z0MR15TB	0.15	±20%	60mV / 25MHz	20 / 25MHz	0.40	250	200
WLFI2012Z0MR18TB	0.18	±20%	60mV / 25MHz	20 / 25MHz	0.40	250	185
WLFI2012Z0MR22TB	0.22	±20%	60mV / 25MHz	20 / 25MHz	0.50	250	170
WLFI2012Z0MR27TB	0.27	±20%	60mV / 25MHz	20 / 25MHz	0.50	250	150
WLFI2012Z0MR33TB	0.33	±20%	60mV / 25MHz	20 / 25MHz	0.55	250	145
WLFI2012Z0MR39TB	0.39	±20%	60mV / 25MHz	25 / 25MHz	0.65	200	135
WLFI2012Z0MR47PB	0.47	±20%	60mV / 25MHz	25 / 25MHz	0.65	200	125
WLFI2012Z0MR56PB	0.56	±20%	60mV / 25MHz	25 / 25MHz	0.75	150	115
WLFI2012Z0MR68PB	0.68	±20%	60mV / 25MHz	25 / 25MHz	0.80	150	105
WLFI2012Z0M1R0TB	1.0	±20%	60mV / 10MHz	45 / 10MHz	0.40	50	75
WLFI2012Z0M1R5TB	1.5	±20%	60mV / 10MHz	45 / 10MHz	0.50	50	60
WLFI2012Z0M1R8TB	1.8	±20%	60mV / 10MHz	45 / 10MHz	0.60	50	55
WLFI2012Z0M2R2TB	2.2	±20%	60mV / 10MHz	45 / 10MHz	0.65	30	50
WLFI2012Z0M2R7PB	2.7	±20%	60mV / 10MHz	45 / 10MHz	0.75	30	45
WLFI2012Z0M3R3PB	3.3	±20%	60mV / 10MHz	45 / 10MHz	0.80	30	41
WLFI2012Z0M4R7PB	4.7	±20%	60mV / 10MHz	45 / 10MHz	1.00	30	35
WLFI2012Z0M100PB	10.0	±20%	60mV / 2MHz	45 / 2MHz	1.15	15	24

NOTE: Thickness C size (mm) - 0.85mm, 4k pcs/reel; 1.25mm, 2k pcs/reel

Characteristic Curve



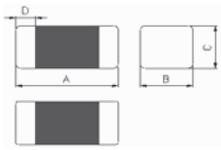


Ferrite Chip Bead WLBD0603 Series

Mechanical Dimensions

(Unit: mm)

WLBD0603



WLBD Series	A	B	C	D
WLBD0603 (EIA 0201)	0.6 ±0.03mm	0.30±0.03mm	0.30±0.03mm	0.1~0.2 mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD0603K2U220TP	22	100	0.065	500
WLBD0603K2U330TP	33	100	0.07	500
WLBD0603K2U800TP	80	100	0.40	200
WLBD0603K2U121TP	120	100	0.45	200
WLBD0603K2U241TP	240	100	0.65	200
WLBD0603K2U601TP	600	100	1.20	150
WLBD0603K2U102TP	1000	100	1.15	200

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD0603B1U600TP	60	100	0.25	200
WLBD0603B1U121TP	120	100	0.40	200
WLBD0603B1U241TP	240	100	0.80	200
WLBD0603B1U471TP	470	100	1.05	100
WLBD0603B1U601TP	600	100	1.20	100

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD0603H1U100TP	10	100	0.25	200
WLBD0603H1U220TP	22	100	0.45	200
WLBD0603H1U330TP	33	100	0.55	150
WLBD0603H1U471TP	47	100	0.70	150
WLBD0603H1U561TP	56	100	1.00	100
WLBD0603H1U800TP	80	100	1.30	100
WLBD0603H1U121TP	120	100	1.50	100

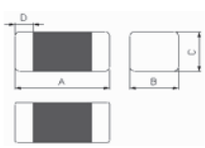
Rated current: based on temperature rise test
In compliance with EIA 595

Ferrite Chip Bead WLBD1005 Series

Mechanical Dimensions

(Unit: mm)

WLBD1005



WLBD Series	A	B	C	D
WLBD1005 (EIA 0402)	1.00±0.10mm	0.50±0.10mm	0.50±0.10mm	0.25±0.10mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD1005K2U100TP	10	100	0.10	300
WLBD1005K2U200TP	20	100	0.20	300
WLBD1005K2U300TP	30	100	0.25	300
WLBD1005K2U400TP	40	100	0.30	300
WLBD1005K2U600TP	60	100	0.35	300
WLBD1005K2U700TP	70	100	0.35	300
WLBD1005K2U121TP	120	100	0.40	300
WLBD1005K2U241TP	240	100	0.70	200
WLBD1005K2U301TP	300	100	0.80	200
WLBD1005K2U471TP	470	100	1.00	200
WLBD1005K2U601TP	600	100	1.00	300
WLBD1005K2U102TP	1000	100	1.50	200
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER		• HP4338A/B MILLIOHMMETER • HP6632B SYSTEM DC POWER SUPPLY	

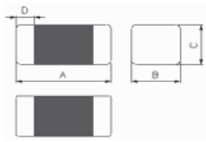
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD1608 Series

Mechanical Dimensions

(Unit: mm)

WLBD1608



WLBD Series	A	B	C	D
WLBD1608 (EIA 0603)	1.60±0.15mm	0.80±0.15mm	0.80±0.15mm	0.30±0.20mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD1608K2U100TP	10	100	0.05	600
WLBD1608K2U300TP	30	100	0.08	600
WLBD1608K2U600TP	60	100	0.10	600
WLBD1608K2U800TP	80	100	0.10	600
WLBD1608K2U121TP	120	100	0.15	600
WLBD1608K2U181TP	180	100	0.30	300
WLBD1608K2U221TP	220	100	0.30	300
WLBD1608K2U301TP	300	100	0.35	300
WLBD1608K2U471TP	470	100	0.40	300
WLBD1608K2U601TP	600	100	0.45	200
WLBD1608K2U102TP	1000	100	0.60	100
WLBD1608K2U182TP	1800	100	0.70	100
WLBD1608K2U252TP	2500	100	0.70	100
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER		• HP4338A/B MILLIOHMMETER • HP6632B SYSTEM DC POWER SUPPLY	

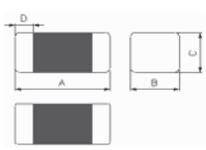
Operating temperature range : - 55℃ ~ +125℃ Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max Soldering methond Reflow

Ferrite Chip Bead WLBD2012 Series

Mechanical Dimensions

(Unit: mm)

WLBD2012



WLBD Series	A	B	Thickness C	D
WLBD2012 (EIA 0805)	2.00±0.20mm	1.20±0.20mm	0.85±0.20mm 1.25±0.20mm	0.50±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD2012K2U300TP	30	100	0.05	800
WLBD2012K2U400TP	40	100	0.05	800
WLBD2012K2U600TP	60	100	0.15	800
WLBD2012K2U800TP	80	100	0.15	800
WLBD2012K2U121TP	120	100	0.15	800
WLBD2012K2U221TP	220	100	0.20	500
WLBD2012K2U301TP	300	100	0.20	500
WLBD2012K2U601TP	600	100	0.30	500
WLBD2012K2U102TP	1000	100	0.35	300
WLBD2012K2U202TP	2000	100	0.50	200
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER		• HP4338A/B MILLIOHMMETER • HP6632B SYSTEM DC POWER SUPPLY	

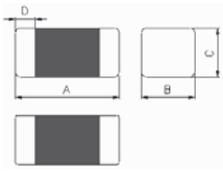
Operating temperature range : - 55℃ ~ +125℃ Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max Soldering methond Reflow

Ferrite Chip Bead WLBD3216 Series

Mechanical Dimensions

(Unit: mm)

WLBD3216



WLBD Series	A	B	C	D
WLBD3216 (EIA 1206)	3.20±0.20mm	1.60±0.20mm	1.10±0.20mm	0.50±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD3216K2U310TP	31	100	0.05	800
WLBD3216K2U500TP	50	100	0.08	800
WLBD3216K2U700TP	70	100	0.10	800
WLBD3216K2U121TP	120	100	0.15	600
WLBD3216K2U601TP	600	100	0.30	500
WLBD3216K2U102TP	1000	100	0.40	500
WLBD3216K2U122TP	1200	100	0.40	500
WLBD3216K2U152TP	1500	50	0.50	200
WLBD3216K2U202TP	2000	30	0.50	200
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

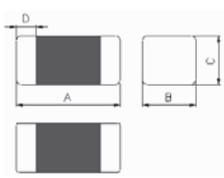
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD3225 Series

Mechanical Dimensions

(Unit: mm)

WLBD3225



WLBD Series	A	B	C	D
WLBD3225 (EIA 1208)	3.20±0.20mm	2.50±0.20mm	1.3±0.20mm	0.50±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD3225K2U600TP	60	100	0.30	800
WLBD3225K2U900TP	90	100	0.30	800
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

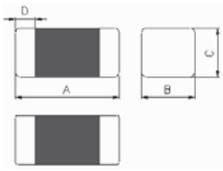
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD4516 Series

Mechanical Dimensions

(Unit: mm)

WLBD4516



WLBD Series	A	B	C	D
WLBD4516 (EIA 1806)	4.50±0.25mm	1.60±0.20mm	1.6±0.20mm	0.60±0.40mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD4516K2U800TP	80	100	0.10	800
WLBD4516K2U151TP	150	100	0.30	800
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

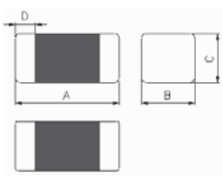
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD4532 Series

Mechanical Dimensions

(Unit: mm)

WLBD4532



WLBD Series	A	B	C	D
WLBD4532 (EIA 1812)	4.50±0.25mm	3.20±0.24mm	1.5±0.25mm	0.60±0.40mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD4532K2U700TP	70	100	0.40	800
WLBD4532K2U800TP	80	100	0.40	800
WLBD4532K2U121TP	120	100	0.40	800
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

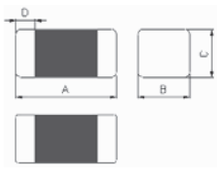
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD1005HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD1005HC



WLBD Series	A	B	C	D
WLBD1005HC (EIA 0402)	1.00±0.10mm	0.50±0.10mm	0.50±0.10mm	0.25±0.10mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD1005HCU100TH	10	100	0.09	2000
WLBD1005HCU300TH	30	100	0.09	2000
WLBD1005HCU600TH	60	100	0.20	1000
WLBD1005HCU121TH	120	100	0.15	1500
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

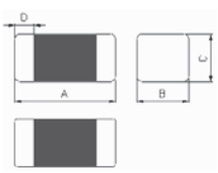
GENERAL TECHNICAL DATA
1. Operating temperature range : - 55℃ ~ +125℃
2. Storage Condition : Less than 40℃ and 70% RH
3. Storage Time: 12 months (Size: 1005 above)
4. Soldering method: Reflow or Wave Soldering

Ferrite Chip Bead WLBD1608HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD1608HC



WLBD Series	A	B	C	D
WLBD1608HC (EIA 0603)	1.60±0.15mm	0.80±0.15mm	0.80±0.15mm	0.30±0.20mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD1608HCU300TH	30	100	0.04	3000
WLBD1608HCU600TH	60	100	0.04	3000
WLBD1608HCU800TH	80	100	0.04	3000
WLBD1608HCU121TH	120	100	0.07	2500
WLBD1608HCU221TH	220	100	0.09	2000
WLBD1608HCU301TH	300	100	0.09	2000
WLBD1608HCU471TH	470	100	0.20	1000
WLBD1608HCU601TH	600	100	0.20	1000
WLBD1608HCU102TH	1000	100	0.25	800
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

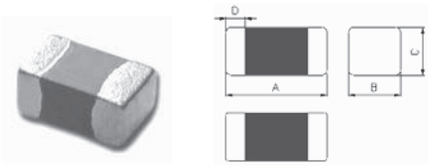
GENERAL TECHNICAL DATA
1. Operating temperature range : - 55℃ ~ +125℃
2. Storage Condition : Less than 40℃ and 70% RH
3. Storage Time: 12 months (Size: 1005 above)
4. Soldering method: Reflow or Wave Soldering

Ferrite Chip Bead WLBD2012HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD2012HC



WLBD Series	A	B	C	D
WLBD2012HC (EIA 0805)	2.00±0.20mm	1.25±0.20mm	0.85±0.20mm	0.50±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD2012HCU310TH	31	100	0.015	6000
WLBD2012HCU400TH	40	100	0.03	4000
WLBD2012HCU600TH	60	100	0.04	3000
WLBD2012HCU800TH	80	100	0.02	5000
WLBD2012HCU121TH	120	100	0.02	5000
WLBD2012HCU221TH	220	100	0.04	3000
WLBD2012HCU301TH	300	100	0.09	2000
WLBD2012HCU331TH	330	100	0.09	2000
WLBD2012HCU601TH	600	100	0.09	2000
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

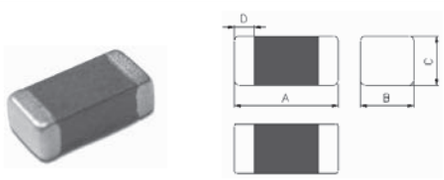
GENERAL TECHNICAL DATA
1. Operating temperature range : - 55℃ ~ +125℃
2. Storage Condition : Less than 40℃ and 70% RH
3. Storage Time: 12 months (Size: 1005 above)
4. Soldering method: Reflow or Wave Soldering

Ferrite Chip Bead WLBD3216HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD3216HC



WLBD Series	A	B	C	D
WLBD3216HC (EIA1206)	3.20±0.20mm	1.60±0.20mm	0.80±0.20mm	0.30±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD3216HCU300TH	30	100	0.015	6000
WLBD3216HCU500TH	50	100	0.015	6000
WLBD3216HCU800TH	80	100	0.03	4000
WLBD3216HCU121TH	120	100	0.015	6000
WLBD3216HCU601TH	600	100	0.07	2500
WLBD3216HCU122TH	1200	100	0.2	1000
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

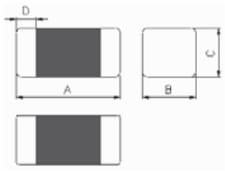
GENERAL TECHNICAL DATA
1. Operating temperature range : - 55℃ ~ +125℃
2. Storage Condition : Less than 40℃ and 70% RH
3. Storage Time: 12 months (Size: 1005 above)
4. Soldering method: Reflow or Wave Soldering

Ferrite Chip Bead WLBD3225HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD3225HC



WLBD Series	A	B	C	D
WLBD3225 (EIA 1208)	3.20±0.20mm	2.50±0.20mm	1.3±0.20mm	0.50±0.30mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD3225HCU600TH	60	100	0.15	1500
WLBD3225HCU102TH	1000	50	0.09	2000
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

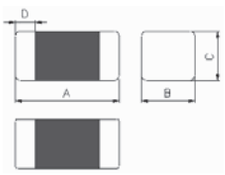
GENERAL TECHNICAL DATA
1. Operating temperature range : - 55℃ ~ +125℃
2. Storage Condition : Less than 40℃ and 70% RH
3. Storage Time: 12 months (Size: 1005 above)
4. Soldering method: Reflow or Wave Soldering

Ferrite Chip Bead WLBD4516HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD4516HC



WLBD Series	A	B	C	D
WLBD4516 (EIA 1806)	4.50±0.25mm	1.60±0.20mm	1.6±0.20mm	0.60±0.40mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD4516HCU600TH	60	100	0.015	6000
WLBD4516HCU851TH	850	100	0.15	1500
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

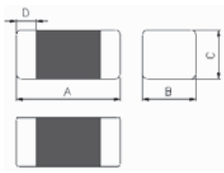
Operating temperature range: - 55℃~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Ferrite Chip Bead WLBD4532HC Series (High Current)

Mechanical Dimensions

(Unit: mm)

WLBD4532HC



WLBD Series	A	B	C	D
WLBD4532 (EIA 1812)	4.50±0.25mm	3.20±0.24mm	1.5±0.25mm	0.60±0.40mm

Electrical Specification

Walsin Part Number	Impedance (Ω) +/-25%	Test Frequency (MHz)	DC Resistance (Ω) max.	Rated Current (mA) max.
WLBD4532HCU800TH	80	100	0.01	9000
WLBD4532HCU12TH	120	100	0.015	6000
WLBD4532HCU601TH	600	50	0.04	3000
WLBD4532HCU132TH	1300	60	0.04	3000
Test Level	250 mV			
Test Instruments	• HP4291B RF IMPEDANCE / MATERIAL ANALYZER • HP4338A/B MILLIOHMMETER • Agilent 8720ES S-PARAMETER NETWORK ANALYZER • HP6632B SYSTEM DC POWER SUPPLY			

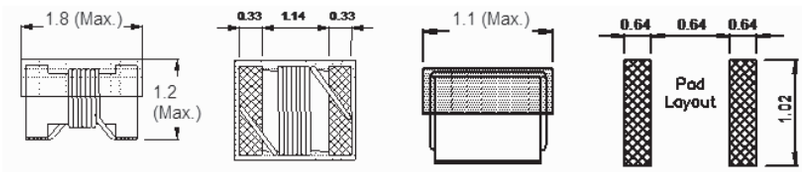
Operating temperature range : - 55℃ ~ +125℃
Storage Condition : Less than 40℃ and 70% RH
Storage Time: 6 months Max
Soldering methond Reflow

Wire Wound Ferrite Chip Inductor WLFW1608 Series

Mechanical Dimensions

(Unit: mm)

WLFW1608



Electrical Specification

PART NO.	L (uH)	Tolerance	Q (Min)	Measuring Frequency (MHz)	SRF (MHz) Min	RDC Max (Ω)	Irms (mA)	COLOR CODE
WLFW1608Z0□47NPB	0.047	J, K	12	7.9	2000	0.075	1800	White
WLFW1608Z0□51NPB	0.051	J, K	12	7.9	1500	0.075	1800	Violet
WLFW1608Z0□68NPB	0.068	J, K	12	7.9	1500	0.12	1800	Gray
WLFW1608Z0□72NPB	0.072	J, K	12	7.9	1500	0.12	1800	Brown
WLFW1608Z0□R10PB	0.1	J, K	12	7.9	1150	0.13	1700	Black
WLFW1608Z0□R12PB	0.12	J, K	12	7.9	1100	0.15	1700	Orange
WLFW1608Z0□R15PB	0.15	J, K	15	7.9	1050	0.15	1600	Brown
WLFW1608Z0□R18PB	0.18	J, K	15	7.9	950	0.15	1500	Green
WLFW1608Z0□R22PB	0.22	J, K	15	7.9	900	0.30	1200	Red
WLFW1608Z0□R24PB	0.24	J, K	15	7.9	850	0.16	1460	Green
WLFW1608Z0□R27PB	0.27	J, K	15	7.9	835	0.30	1460	Yellow
WLFW1608Z0□R33PB	0.33	J, K	15	7.9	725	0.40	1420	Orange
WLFW1608Z0□R39PB	0.39	J, K	15	7.9	680	0.41	1400	Blue
WLFW1608Z0□R47PB	0.47	J, K	15	7.9	640	0.43	1400	Black
WLFW1608Z0□R56PB	0.56	J, K	15	7.9	630	0.44	1400	Brown
WLFW1608Z0□R68PB	0.68	J, K	15	7.9	510	0.52	1340	Red
WLFW1608Z0□R78PB	0.78	J, K	15	7.9	465	0.63	1300	Orange
WLFW1608Z0□R82PB	0.82	J, K	15	7.9	460	0.69	1200	Yellow
WLFW1608Z0□1R0PB	1	J, K	15	7.9	320	0.81	1100	Green
WLFW1608Z0□1R2PB	1.2	J, K	15	7.9	270	0.87	1000	Blue
WLFW1608Z0□1R5PB	1.5	J, K	15	7.9	230	0.96	920	Violet
WLFW1608Z0□1R8PB	1.8	J, K	15	7.9	210	1.10	900	Gray
WLFW1608Z0□2R2PB	2.2	J, K	15	7.9	115	1.20	740	White
WLFW1608Z0□2R7PB	2.7	J, K	15	7.9	100	1.38	700	Black
WLFW1608Z0□3R3PB	3.3	J, K	15	7.9	84	1.50	680	Brown
WLFW1608Z0□3R9PB	3.9	J, K	15	7.9	75	1.50	600	Red
WLFW1608Z0□4R7PB	4.7	J, K	15	7.9	67	2.10	580	Orange
WLFW1608Z0□5R6PB	5.6	J, K	15	7.9	55	2.37	540	Yellow
WLFW1608Z0□6R8PB	6.8	J, K	15	7.9	48	3.10	500	Green
WLFW1608Z0□7R8PB	7.8	J, K	15	7.9	40	3.35	460	Blue
WLFW1608Z0□8R2PB	8.2	J, K	15	7.9	38	3.50	440	Violet
WLFW1608Z0□100PB	10	J, K	15	7.9	32	4.46	400	Gray

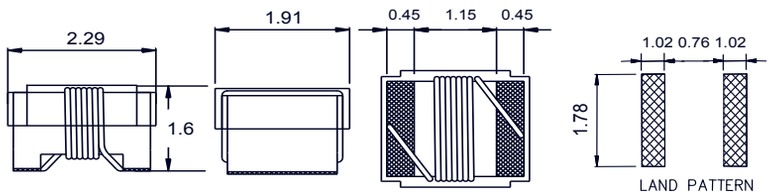
Tolerance: K±10%, J±5%
※MSL: LEVEL1
OPERATING TEMPERATURE RANGE: -40℃ ~ +125℃
TEMPERATURE RISE: Below 15℃ at Rated Current
L, Q: TESTED BY AGILENT 4287A with 16197A or its equivalent
SRF: TESTED BY HP 8753E or HP4291B with 16193A or its equivalent
DCR: TESTED BY AGILENT 4338B or its equivalent

Wire Wound Ferrite Chip Inductor WLFW2012 Series

Mechanical Dimensions

(Unit: mm)

WLFW2012



Electrical Specification

PART NO.	L(uH)	Test Freq. (MHz)	Inductance Tolerance	Q Min	SRF (MHz) Min	DCR (OHM) Max	Irms (mA)	COLOR CODE
WLFW2012Z0□78NPB	0.078	7.9	J, K	19	1440	0.042	2000	BLACK
WLFW2012Z0□R11PB	0.11	7.9	J, K	19	1400	0.05	2000	BROWN
WLFW2012Z0□R47PB	0.47	7.9	J, K	19	500	0.31	720	RED
WLFW2012Z0□R68PB	0.68	7.9	J, K	20	400	0.46	590	ORANGE
WLFW2012Z0□1R0PB	1.0	7.9	J, K	20	340	0.69	500	YELLOW
WLFW2012Z0□1R2PB	1.2	7.9	J, K	15	400	0.75	800	BLACK
WLFW2012Z0□1R5PB	1.5	7.9	J, K	20	275	0.83	490	GREEN
WLFW2012Z0□1R8PB	1.8	7.9	J, K	20	246	1.15	410	BLUE
WLFW2012Z0□2R2PB	2.2	7.9	J, K	20	106	1.28	365	VIOLET
WLFW2012Z0□2R7PB	2.7	7.9	J, K	20	105	1.48	350	GRAY
WLFW2012Z0□3R3PB	3.3	7.9	J, K	20	83	1.57	330	WHITE
WLFW2012Z0□3R9PB	3.9	7.9	J, K	20	52	1.70	300	BLACK
WLFW2012Z0□4R7PB	4.7	7.9	J, K	20	50	1.87	280	BROWN
WLFW2012Z0□6R8PB	6.8	7.9	J, K	20	35	2.25	260	RED
WLFW2012Z0□8R2PB	8.2	2.5	J, K	18	27	2.55	250	ORANGE
WLFW2012Z0□100PB	10	2.5	J, K	18	21	3.45	200	YELLOW
WLFW2012Z0□150PB	15	2.5	J, K	18	17	5.03	180	GREEN
WLFW2012Z0□180PB	18	2.5	J, K	18	23	4.48	180	ORANGE
WLFW2012Z0□220PB	22	2.5	J, K	18	13	6.18	150	BLUE
WLFW2012Z0□270PB	27	2.5	J, K	15	11	11.04	120	VIOLET

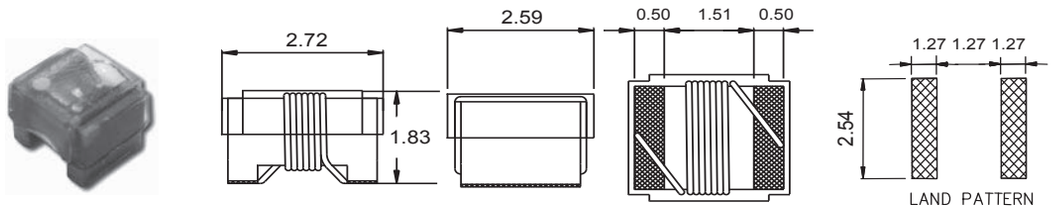
Tolerance: K±10%, J±5%
※MSL: LEVEL1
OPERATING TEMPERATURE RANGE: -40℃ ~ +125℃
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E
DCR TEST BY ZENTECH 502BC

Wire Wound Ferrite Chip Inductor WLFW2520 Series

Mechanical Dimensions

(Unit: mm)

WLFW2520



Electrical Specification

Part No	L (μH)	Test Freq. (MHz)	Inductance Tolerance	Q Min	Test Freq. (MHz)	SRF (MHz) Min	DCR (OHM) Max	Irms (mA)	COLOR CODE		
									1st	2nd	multiplier
WLFW2520Z0□47NPB	0.047	50	J, K	50	50	1800	0.045	650	Yellow	Violet	Black
WLFW2520Z0□68NPB	0.068	50	J, K	50	50	1800	0.045	650	Blue	Gray	Black
WLFW2520Z0□82NPB	0.082	50	J, K	50	50	1800	0.035	1000	Gray	Red	Black
WLFW2520Z0□R10PB	0.10	50	J, K	50	50	1800	0.196	700	Brown	Black	Brown
WLFW2520Z0□R18PB	0.18	50	J, K	50	50	1000	0.290	700	Brown	Gray	Brown
WLFW2520Z0□R20PB	0.20	50	J, K	50	50	900	0.285	700	Red	Black	Brown
WLFW2520Z0□R24PB	0.24	50	J, K	50	50	900	0.135	700	Red	Yellow	Brown
WLFW2520Z0□R56PB	0.56	7.9	J, K	40	50	460	0.300	700	Green	Blue	Brown
WLFW2520Z0□R68PB	0.68	7.9	J, K	27	50	400	0.320	700	Blue	Gray	Brown
WLFW2520Z0□1R0PB	1.0	50	J, K	50	50	380	0.620	650	Brown	Black	Red
WLFW2520Z0□1R2PB	1.2	7.9	J, K	48	50	210	0.68	650	Brown	Red	Red
WLFW2520Z0□1R5PB	1.5	7.9	J, K	41	50	190	0.76	630	Brown	Green	Red
WLFW2520Z0□1R8PB	1.8	7.9	J, K	39	50	170	0.84	600	Brown	Gray	Red
WLFW2520Z0□2R2PB	2.2	7.9	J, K	34	50	150	1.10	520	Red	Red	Red
WLFW2520Z0□2R7PB	2.7	7.9	J, K	34	50	135	1.28	490	Red	Violet	Red
WLFW2520Z0□3R3PB	3.3	7.9	J, K	32	50	120	1.46	450	Orange	Orange	Red
WLFW2520Z0□3R9PB	3.9	7.9	J, K	32	7.9	105	1.56	420	Orange	White	Red
WLFW2520Z0□4R3PB	4.3	7.9	J, K	30	7.9	85	1.70	400	Yellow	Orange	Red
WLFW2520Z0□4R7PB	4.7	7.9	J, K	31	7.9	90	1.68	400	Yellow	Violet	Red
WLFW2520Z0□5R6PB	5.6	7.9	J, K	31	7.9	80	1.82	380	Green	Blue	Red
WLFW2520Z0□6R8PB	6.8	7.9	J, K	31	7.9	70	2.00	360	Blue	Gray	Red
WLFW2520Z0□8R2PB	8.2	7.9	J, K	23	7.9	65	2.65	330	Gray	Red	Red
WLFW2520Z0□100PB	10.0	7.9	J, K	31	7.9	60	2.95	300	Brown	Black	Orange
WLFW2520Z0□120PB	12.0	7.9	J, K	30	7.9	50	3.35	270	Brown	Red	Orange
WLFW2520Z0□150PB	15.0	7.9	J, K	38	7.9	50	3.04	250	Brown	Green	Orange
WLFW2520Z0□220PB	22.0	2.52	J, K	10	2.52	10	2.80	120	Red	Red	Orange

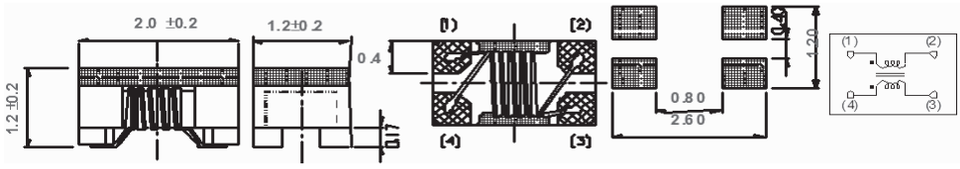
Tolerance:K±10%, J±5%, H±3%
※MSL: LEVEL1
OPERATING TEMPERATURE RANGE: -40℃ ~ +125℃
L, Q TEST BY HP4291B
SRF TEST BY HP 8753E
DCR TEST BY ZENTECH 502BC

Common Mode Choke WTCF2012 Series

Mechanical Dimensions

(Unit: mm)

WTCF2012



Electrical Specification

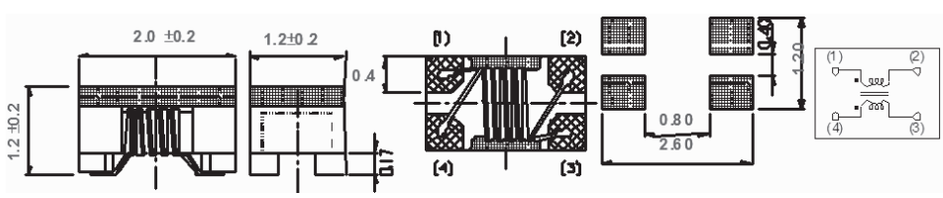
Part Number	Z (OHM) @100MHz ±20 %	DCR (OHM) MAX.	RATE CURRENT (mA)	Cut-off Frequency (GHz) typ.	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance @125VDC (MOHM) min.
WTCF2012Z0M670PB	67	0.25	400	1.0	50	125	10
WTCF2012Z0M750PB	75	0.30	400				
WTCF2012Z0M900PB	90	0.35	330				
WTCF2012Z0M101PB	100	0.35	330				
WTCF2012Z0M121PB	120	0.30	370				
WTCF2012Z0M161PB	160	0.35	350				
WTCF2012Z0M181PB	180	0.35	330				
WTCF2012Z0M201PB	200	0.40	300				
WTCF2012Z0M221PB	220	0.40	300				
WTCF2012Z0M261PB	260	0.40	300				
WTCF2012Z0M361PB	360	0.50	300				
WTCF2012Z0M371PB	370	0.45	280				
WTCF2012Z0M431PB	430	0.55	280				
WTCF2012Z0M601PB	600	0.60	240				

Common Mode Choke WTCF2012FH Series

Mechanical Dimensions

(Unit: mm)

WTCF2012FH



Electrical Specification

Part Number	Z (OHM) @100MHz ±20 %	DCR (OHM) MAX.	RATE CURRENT (mA)	Rated Voltage Vdc(V)	Cut-off Frequency (GHz) typ.	Isolation Resistance (MΩ)MIN.
WTCF2012FHM670PB	67	0.25	400	50	6GHz	10
WTCF2012FHM900PB	90	0.30	370	50	6GHz	10
WTCF2012FHM121PB	120	0.35	330	50	6GHz	10

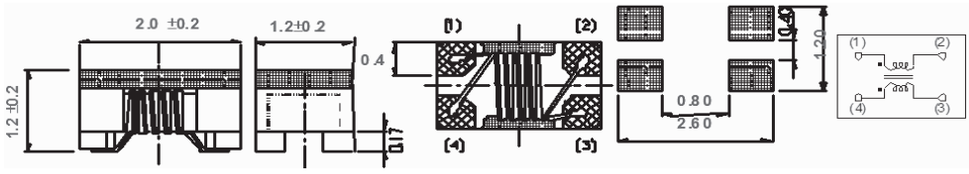
WTCF2012 and WTCF2012FH
TEST INSTRUMENT
Z Tested by Agilent4291B+16193A
DCR Tested by Zentech502BC
Insulation Resistance Tested by Agilent 4338B
Operating Temperature Range: -40℃ ~ +125℃
※MSL: LEVEL 1

Common Mode Choke WQCF2012 Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WTCF2012



Electrical Specification

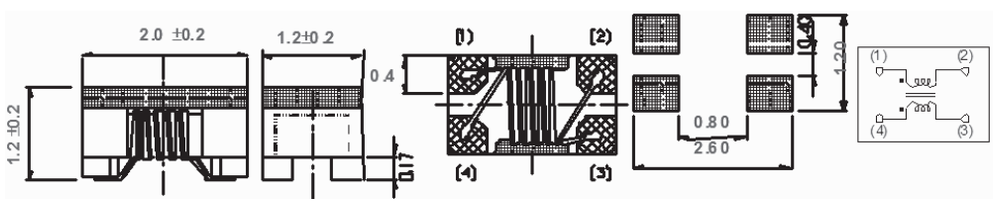
WQCF2012 Series	Z (OHM) @100MHz ±20%	DCR MAX. (Ω)	RATE CURRENT (mA)	Cut-off Frequency (GHz) TYP.	Rated Voltage (Vdc)	Withstand Voltage (Vdc)	Insulation Resistance @125VDC (MOHM)MIN.
WQCF2012Z0M670PB	67	0.25	400	1.0	50	125	10
WQCF2012Z0M750PB	75	0.30	400				
WQCF2012Z0M900PB	90	0.35	330				
WQCF2012Z0M101PB	100	0.35	330				
WQCF2012Z0M121PB	120	0.30	370				
WQCF2012Z0M161PB	160	0.35	350				
WQCF2012Z0M181PB	180	0.35	330				
WQCF2012Z0M201PB	200	0.40	300				
WQCF2012Z0M221PB	220	0.40	300				
WQCF2012Z0M261PB	260	0.40	300				
WQCF2012Z0M361PB	360	0.50	300				
WQCF2012Z0M371PB	370	0.45	280				
WQCF2012Z0M431PB	430	0.55	280				
WQCF2012Z0M601PB	600	0.60	240				
WQCF2012Z0M751PB	750	0.90	220				

Common Mode Choke WQCF2012FH Series (AEC-Q200)

Mechanical Dimensions

(Unit: mm)

WTCF2012FH



Electrical Specification

WQCF2012FH Series	Z (OHM) @100MHz ±20%	DCR MAX. (Ω)	RATE CURRENT (mA)	Cut-off Frequency (GHz) TYP.	Rated Voltage (Vdc)	Insulation Resistance (MOHM) MIN.
WQCF2012FHM670PB	67	0.25	400	6	50	10
WQCF2012FHM900PB	90	0.30	370			
WQCF2012FHM121PB	120	0.35	330			

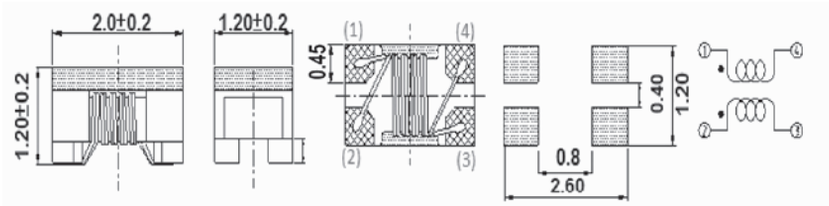
WQCF2012 AND WQCF2012FH TEST INSTRUMENT
Z Tested by Agilent4291B+16193A
DCR Tested by Zentech502BC
Insulation Resistance Tested by Agilent 4338B
Operating Temperature Rrange: -40℃ ~ +125℃
※MSL:LEVEL 1

Balun Transformer WTBL2012 Series

Mechanical Dimensions

(Unit: mm)

WTBL2012



Electrical Specification

Part Number	UB/B Impedance (ohm)	Insulation (m OHM) Min.	Withstand Voltage (DCV)	DCR (OHM) MAX.	Rated Voltage (DCV)	Rated Current (mA)	Frequency Range	Insertion Loss at Freq. Range (max.)
WTBL2012Z0U001PB	50/50	10	125	0.35	50	330	40MHz To 0.86GHz	2.5
WTBL2012Z0U002PB	75/75	10	125	0.35	50	330	50MHz To 1.2GHz	1.2
WTBL2012Z0U003PB	75/75	10	125	0.35	50	330	1.0GHz To 1.5GHz	1.4
WTBL2012Z0U004PB	75/75	10	125	0.35	50	330	50MHz To 1.2GHz	1.2
WTBL2012Z0U005PB	50/50	10	125	0.35	50	330	400MHz To 1.8GHz	2.2
WTBL2012Z0U006PB	75/75	10	125	0.50	50	330	400MHz To 1.8GHz	2.0
WTBL2012Z0U007PB	75/75	10	125	0.50	50	330	50MHz To 1.2GHz	1.2
WTBL2012Z0U008PB	75/75	10	125	0.35	50	330	400MHz To 1.5GHz	1.4
WTBL2012Z0U009PB	75/75	10	125	0.50	50	330	50MHz To 2.35GHz	2.0
WTBL2012Z0U010PB	75/75	10	125	0.50	50	330	250MHz To 2.35GHz	1.5

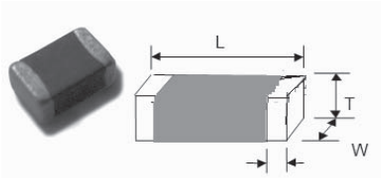
Insertion Loss Tested by Agilent E5071C
DCR Tested by Zentech502BC
Operating Temperature Range: -40℃ ~ +85℃
MSL Level: 1

Multi-Layer Power Inductor WLFM160808 Series

Mechanical Dimensions

(Unit: mm)

WLFM160808



WLFM Series	L	W	T	B (Min/Max)
WLFM160808	1.6±0.15	0.8±0.15	0.8±0.15	0.3±0.2

Electrical Specification

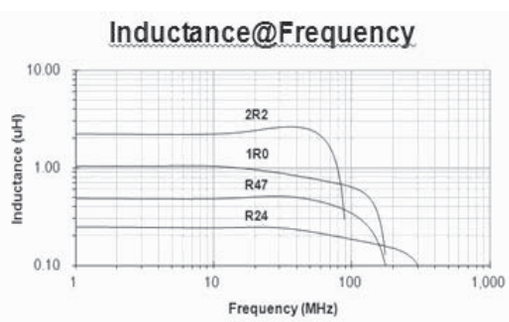
WLFM160808 series (EIA 0603)

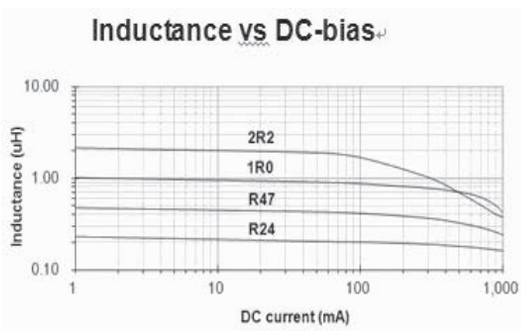
Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (MHz)	RDC (Ω) Max.	Rated Current (mA)
WLFM160808MR24PP	0.24	M	1	0.1	1200
WLFM160808MR47PP	0.47	M	1	0.1	1200
WLFM160808M1R0PP	1.0	M	1	0.2	950
WLFM160808M2R2PP	2.2	M	1	0.3	750

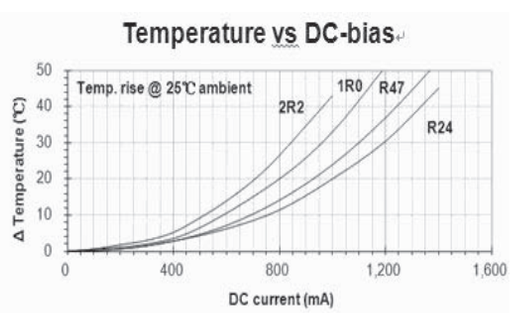
TEST INSTRUMENT :
- HP4291B-RF Impedance / Material Analyzer
- HP4338A/B Milliohm meter

Test Frequency: 1MHz / OSC Level: 100mV

Characteristic Curve





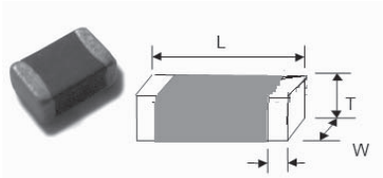


Multi-Layer Power Inductor WLFM201209 Series

Mechanical Dimensions

(Unit: mm)

WLFM201209



WLFM Series	L	W	T	B (Min/Max)
WLFM201209	2.0±0.15	1.25±0.15	0.9±0.1	0.5±0.2

Electrical Specification

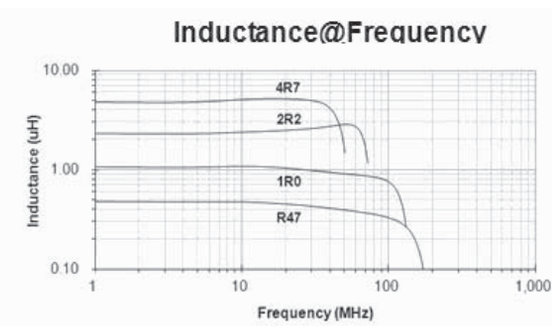
WLFM201209 series (EIA 0805)

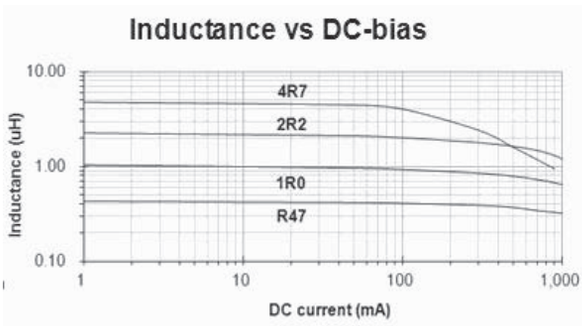
Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (MHz)	RDC (Ω) Max.	Rated Current (mA)
WLFM201209MR47PP	0.47	M	1	0.08	1300
WLFM201209M1R0PP	1.0	M	1	0.1	900
WLFM201209M2R2PP	2.2	M	1	0.23	800
WLFM201209M4R7PP	4.7	M	1	0.23	800

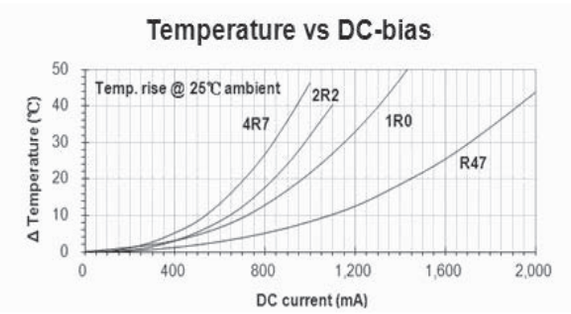
TEST INSTRUMENT :
- HP4291B-RF Impedance / Material Analyzer
- HP4338A/B Milliohm meter

Test Frequency: 1MHz / OSC Level: 100mV

Characteristic Curve





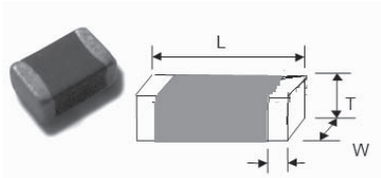


Multi-Layer Power Inductor WLFM201205 Series

Mechanical Dimensions

(Unit: mm)

WLFM201205



WLFM Series	L	W	T	B (Min/Max)
WLFM201205	2.0±0.15	1.25±0.15	0.5±0.5	0.5±0.2

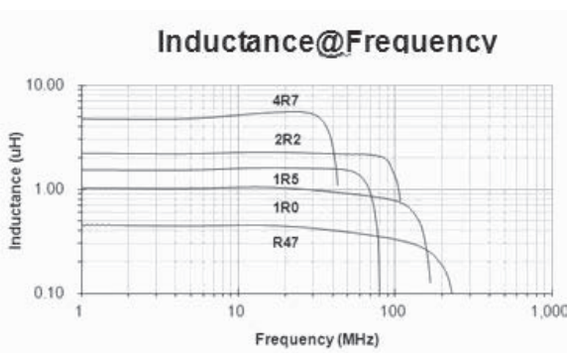
Electrical Specification

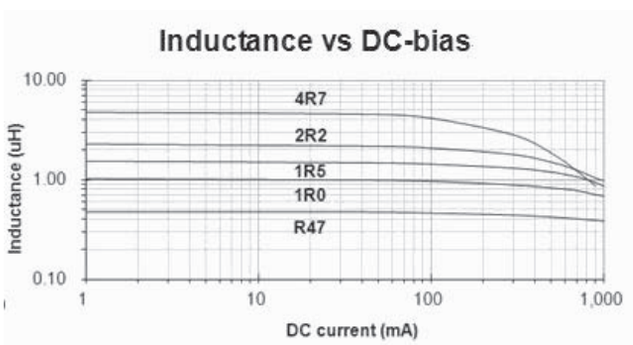
WLFM201205 series (EIA 0805)

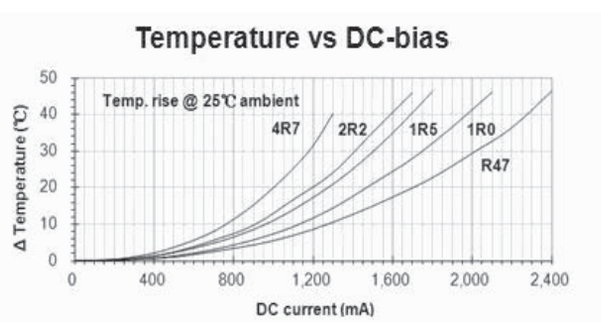
Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (MHz)	RDC (Ω) Max.	Rated Current (mA)
WLFM201205MR47PP	0.47	M	1	0.12	1100
WLFM201205M1R0PP	1.0	M	1	0.19	800
WLFM201205M1R5PP	1.5	M	1	0.26	700
WLFM201205M2R2PP	2.2	M	1	0.33	600

TEST INSTRUMENT :
•HP4291B-RF Impedance / Material Analyzer
•HP4338A/B Milliohm meter
Test Frequency: 1MHz / OSC Level: 100mV

Characteristic Curve





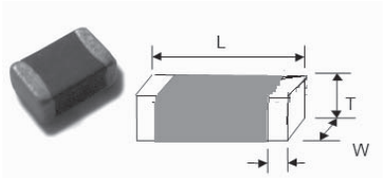


Multi-Layer Power Inductor WLFM201609 Series

Mechanical Dimensions

(Unit: mm)

WLFM201609



WLFM Series	L	W	T	B (Min/Max)
WLFM201609	2.0±0.15	1.6±0.15	0.9±0.5	0.5±0.2

Electrical Specification

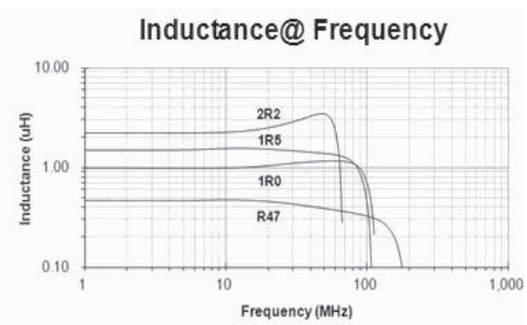
WLFM201609 series (EIA 0805)

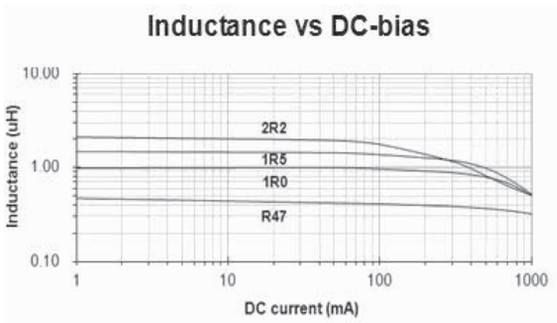
Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (MHz)	RDC (Ω) Max.	Rated Current (mA)
WLFM201609MR47PP	0.47	M	1	0.06	1600
WLFM201609M1R0PP	1.0	M	1	0.09	1400
WLFM201609M1R5PP	1.5	M	1	0.11	1200
WLFM201609M2R2PP	2.2	M	1	0.11	1200
WLFM201609M4R7PP	4.7	M	1	0.14	1100

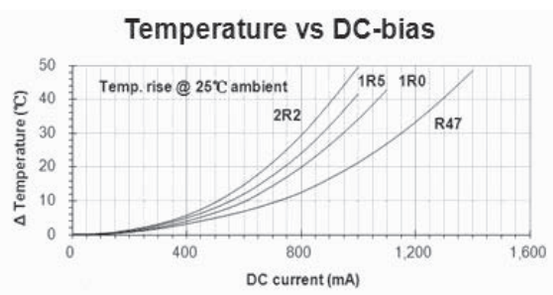
TEST INSTRUMENT :
- HP4291B-RF Impedance / Material Analyzer
- HP4338A/B Milliohm meter

Test Frequency: 1MHz / OSC Level: 100mV

Characteristic Curve





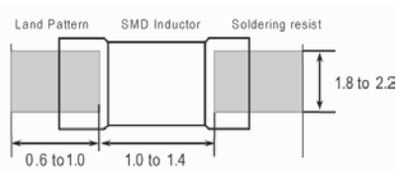


Multi-Layer Power Inductor WLFM2520 Series

Mechanical Dimensions

(Unit: mm)

WLFM2520



Recommend Pattern

Electrical Specification

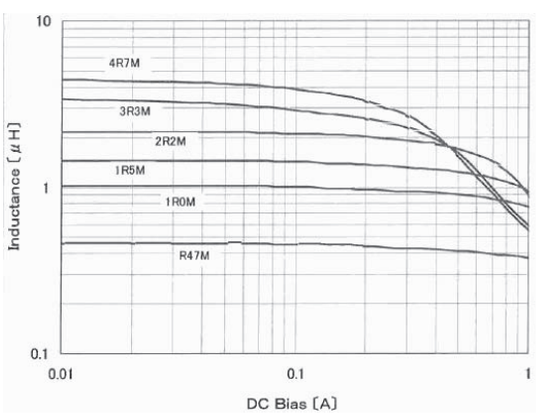
WLFM2520 (EIA 1008)

Ordering Code	Inductance [uH]	Inductance Tolerance	Measuring frequency [MHz]	DC Resistance [Ω]	Rated Current [A] (max.)	Saturation Current [A] (max.)	Thickness [mm]
WLFM2520Z0MR47PB	0.47	M	1	0.04±25%	1.80	1.28	1.0 max
WLFM2520Z0M1R0PB	1.0			0.06±25%	1.60	0.96	
WLFM2520Z0M1R5PB	1.5			0.06±25%	1.50	0.64	
WLFM2520Z0M2R2PB	2.2			0.09±25%	1.30	0.56	
WLFM2520Z0M3R3PB	3.3			0.09±25%	1.20	0.24	
WLFM2520Z0M4R7PB	4.7			0.13±25%	1.10	0.24	

Operating temperature range: -40℃ to 85℃
※Rated current specifies that temperature rise caused by self-generated heat shall be limited to 40℃max
※Saturated current specifies that inductance drop is below 30% during DC loaded (at 20℃)

DC Bias Current vs Inductance (Typical):

WLFM2520 series

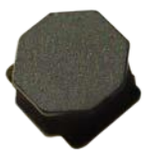


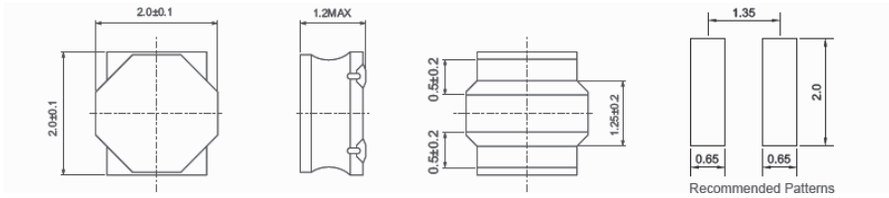
SMD Wire Wound Power Inductor WLPN202012 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN202012



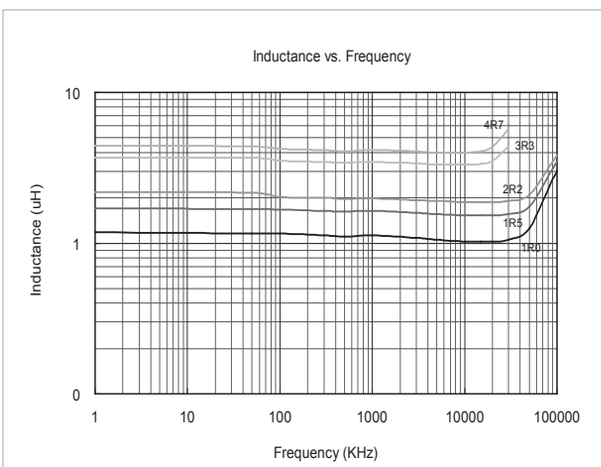


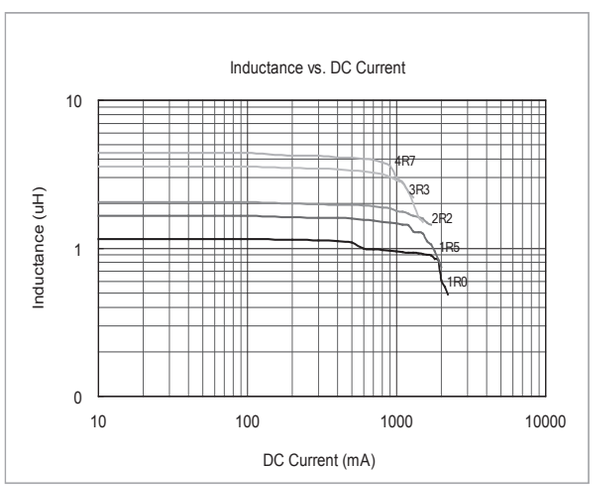
Electrical Specification

Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)			
				Saturation Current Idc1 (Typ.)	Temperature Rise Current Idc2 (Typ.)	Saturation Current Idc1 (Max.)	Temperature Rise Current Idc2 (Max.)
WLPN202012N1R0PB	1.0	±30%	0.070	2050	1850	1900	1700
WLPN202012N1R5PB	1.5	±30%	0.090	1800	1650	1650	1500
WLPN202012M2R2PB	2.2	±20%	0.107	1500	1500	1350	1370
WLPN202012M3R3PB	3.3	±20%	0.190	1150	1100	1000	1020
WLPN202012M4R7PB	4.7	±20%	0.241	1050	1000	900	910

Tolerance: M=±20%, N=±30%
Test Frequency: 100 KHz
Test Equipment:
Inductance: Chroma3302+1320+16502 or equivalent.
DCR: Chroma16502 or equivalent.
SRF: HP4291B or equivalent.
Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
Rated Current: Either Idc1 or Idc2 whichever is smaller.
Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
Storage Temp. Range: -40℃ to +85℃.
MSL: Level 1

Characteristic Curve



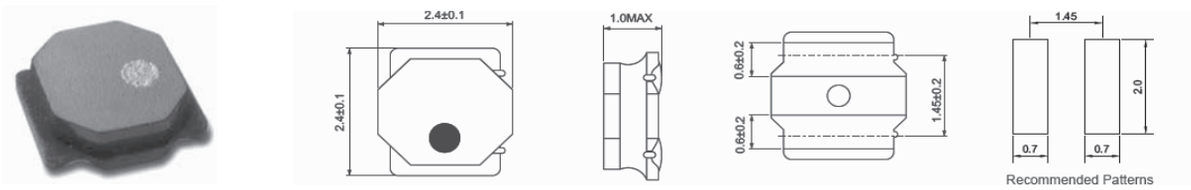


SMD Wire Wound Power Inductor WLPN242410 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN242410



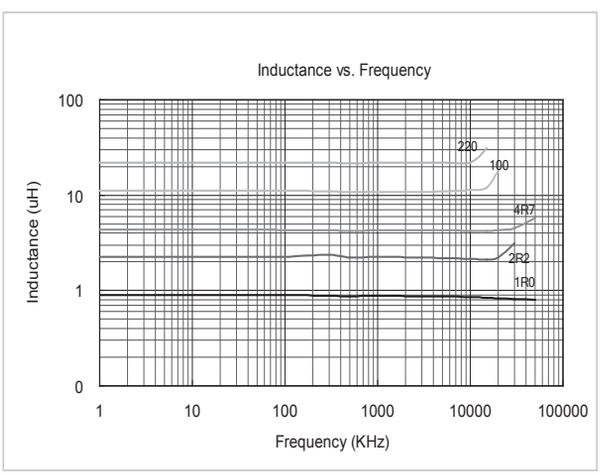
Electrical Specification

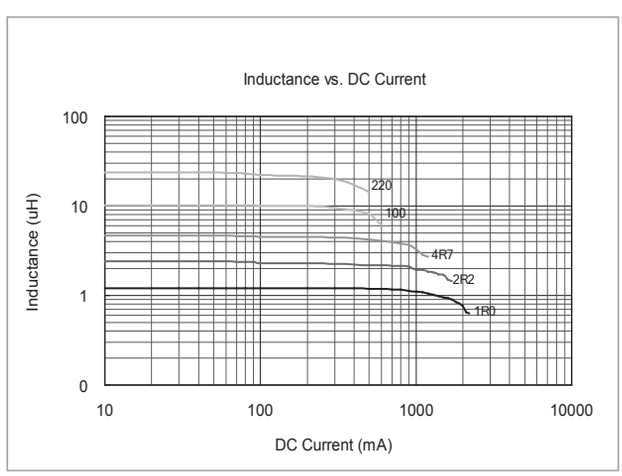
Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
WLPN242410NR68PB	0.68	±30%	0.06	2200	1570	120
WLPN242410N1R0PB	1.00	±30%	0.07	1800	1410	106
WLPN242410M1R5PB	1.50	±20%	0.11	1550	1160	94
WLPN242410M2R2PB	2.20	±20%	0.15	1290	970	77
WLPN242410M3R3PB	3.30	±20%	0.22	1000	770	56
WLPN242410M4R7PB	4.70	±20%	0.29	880	670	50
WLPN242410M6R8PB	6.80	±20%	0.41	750	570	43
WLPN242410M100PB	10.0	±20%	0.69	550	450	32
WLPN242410M150PB	15.0	±20%	1.02	470	370	27
WLPN242410M220PB	22.0	±20%	1.47	390	300	22

Tolerance: M=±20%, N=±30%

1. Test Frequency: 100 KHz.
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +120℃ (Including self-temperature rise).
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1.

Characteristic Curve



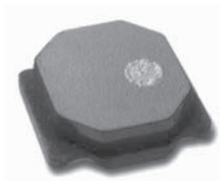


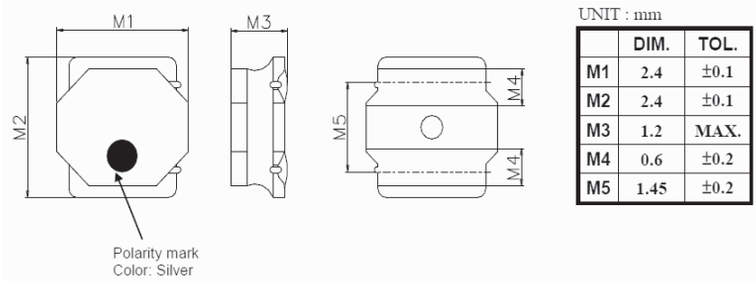
SMD Wire Wound Power Inductor WLPN242412 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN242412

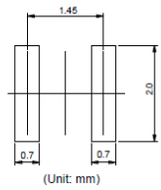




UNIT : mm

	DIM.	TOL.
M1	2.4	±0.1
M2	2.4	±0.1
M3	1.2	MAX.
M4	0.6	±0.2
M5	1.45	±0.2

Recommended Land-Pattern:



Electrical Specification

Part Number	Inductance @100KHz (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω ± 20%)	SRF (MHz)Min	Rated Current (mA) Max	
						Saturation Current Idc1	Temperature Rise Current Idc2
WLPN242412NR47PB	0.47	±30%	100	0.050	180	2900	2100
WLPN242412N1R0PB	1.0	±30%	100	0.077	101	2350	1300
WLPN242412N1R5PB	1.5	±30%	100	0.100	89	2100	1150
WLPN242412M2R2PB	2.2	±20%	100	0.140	72	1700	1000
WLPN242412M3R3PB	3.3	±20%	100	0.225	56	1400	750
WLPN242412M4R7PB	4.7	±20%	100	0.300	45	1150	650
WLPN242412M6R8PB	6.8	±20%	100	0.420	34	950	550
WLPN242412M100PB	10	±20%	100	0.600	29	810	450

Tolerance: M=±20%, N=±30%

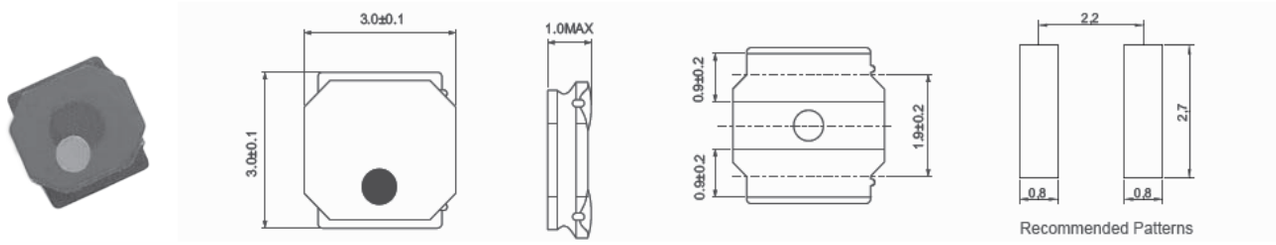
1. Test Frequency: 100 KHz.
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +120℃ (Including self-temperature rise).
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1.

SMD Wire Wound Power Inductor WLPN303010 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN303010

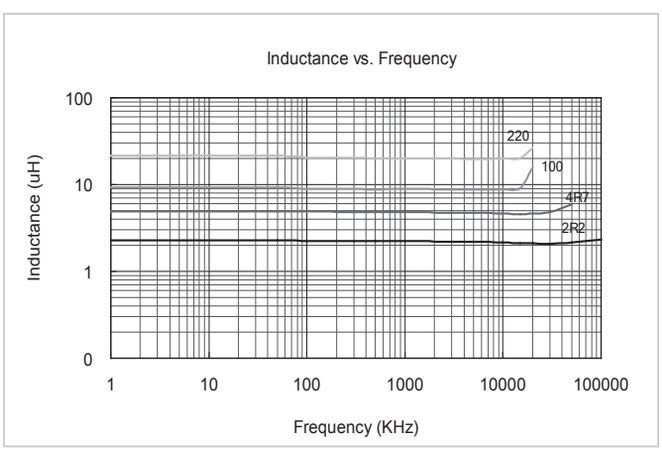


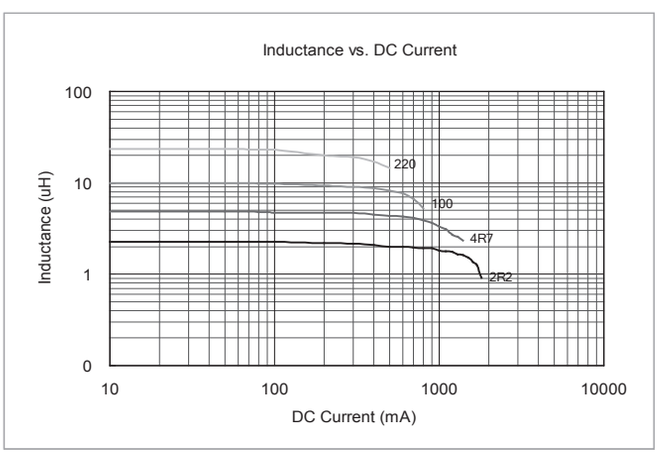
Electrical Specification

Part Number	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
				Saturation Current Idc1	Temperature Rise Current Idc2	
WLPN303010N1R2PB	1.20	±30%	0.065	1700	1480	120
WLPN303010N1R5PB	1.50	±30%	0.075	1440	1370	99
WLPN303010M2R2PB	2.20	±20%	0.083	1300	1300	86
WLPN303010M3R3PB	3.30	±20%	0.130	1000	1030	64
WLPN303010M4R7PB	4.70	±20%	0.170	850	900	50
WLPN303010M6R8PB	6.80	±20%	0.250	700	745	44
WLPN303010M100PB	10.0	±20%	0.350	600	620	34
WLPN303010M150PB	15.0	±20%	0.550	450	480	25
WLPN303010M220PB	22.0	±20%	0.770	380	410	22

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz.
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +120℃ (Including self-temperature rise).
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1.

Characteristic Curve



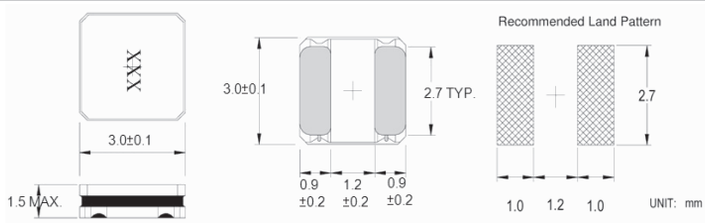


SMD Wire Wound Power Inductor WLPN303015 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN303015

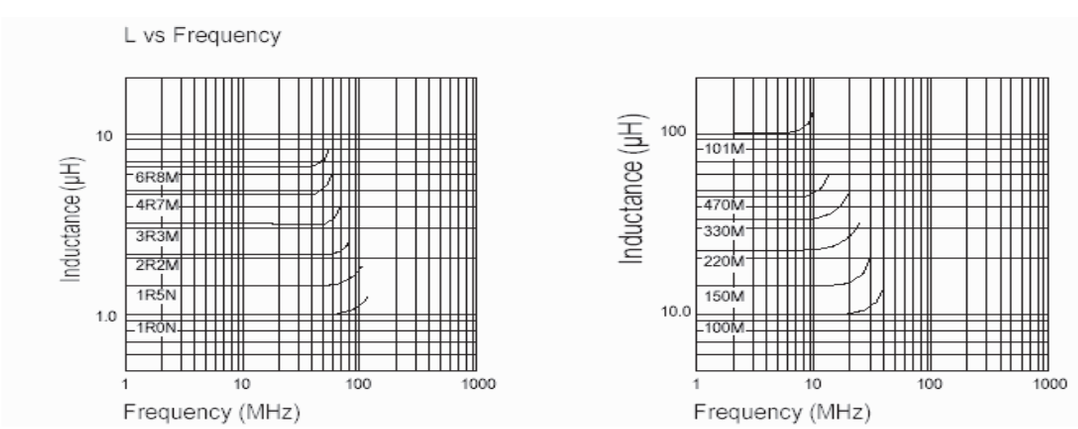


Electrical Specification

Part Number	MARK	Inductance (μH)	TEST FREQ (MHz)	DCR (Ω) Max.	Isat (A) Max.	Irms (A) Max.	TOL.
WLPN303015N1R0PB	1R0	1.0	1	0.048	2.10	2.10	30%
WLPN303015N1R5PB	1R5	1.5	1	0.066	1.80	1.90	
WLPN303015M2R2PB	2R2	2.2	1	0.072	1.48	1.60	20%
WLPN303015M2R7PB	2R7	2.7	1	0.097	1.52	1.43	
WLPN303015M3R3PB	3R3	3.3	1	0.112	1.21	1.45	
WLPN303015M3R6PB	3R6	3.6	1	0.136	1.28	1.20	
WLPN303015M4R7PB	4R7	4.7	1	0.136	1.08	1.25	
WLPN303015M5R1PB	5R1	5.1	1	0.162	1.08	1.09	
WLPN303015M6R2PB	6R2	6.2	1	0.253	1.00	0.86	
WLPN303015M6R8PB	6R8	6.8	1	0.211	0.90	0.90	
WLPN303015M100PB	100	10	1	0.276	0.75	0.87	
WLPN303015M120PB	120	12	1	0.416	0.70	0.68	
WLPN303015M150PB	150	15	1	0.422	0.58	0.65	
WLPN303015M180PB	180	18	1	0.559	0.56	0.59	
WLPN303015M220PB	220	22	1	0.622	0.47	0.55	
WLPN303015M330PB	330	33	1	0.959	0.39	0.45	
WLPN303015M390PB	390	39	1	1.294	0.41	0.39	
WLPN303015M470PB	470	47	1	1.406	0.32	0.40	
WLPN303015M560PB	560	56	1	1.664	0.34	0.33	
WLPN303015M680PB	680	68	1	3.51	0.23	0.28	
WLPN303015M101PB	101	100	1	2.920	0.23	0.25	

Tolerance: M=±20%, N=±30%
1. Test Frequency: 1MHz, 1V
2. Test Equipment:
   L: CHROMA-3302+1320. or equivalent.
   RDC: CH16502BC or equivalent.
3. Isat: Based on inductance decrease 30% Max. (at 20℃)
4. Irms: Base on temperature increase 40% Max. (at 20℃)
5. Operating temperature range: -25℃ to +120℃ (Include self-temperature rise)
6. Storage temperature: -40℃ to +85℃
7. MSL: LEVEL 1

Characteristic Curve

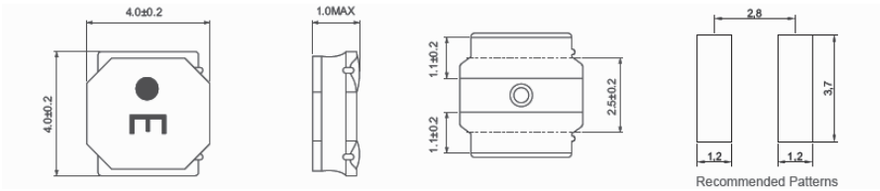


SMD Wire Wound Power Inductor WLPN404010 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN404010

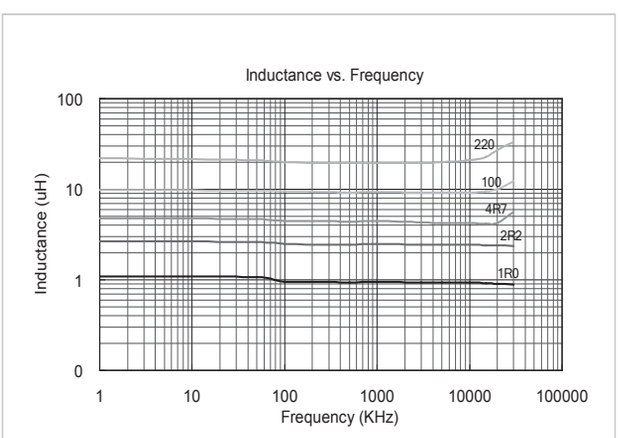


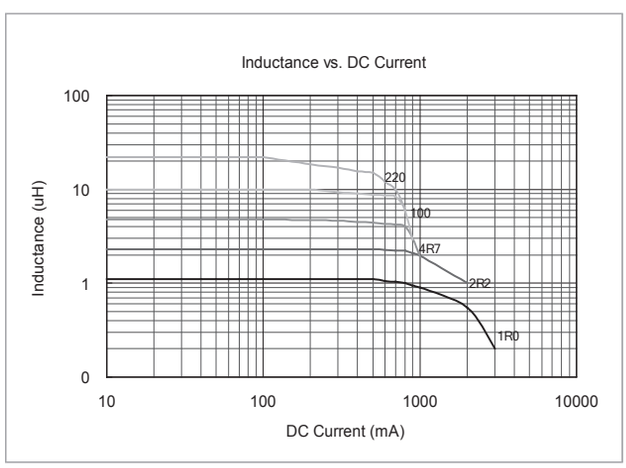
Electrical Specification

Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
WLPN404010N1R0LB	A	1.0	±30%	0.056	2000	1900	116
WLPN404010M2R2LB	C	2.2	±20%	0.085	1200	1500	73
WLPN404010M3R3LB	E	3.3	±20%	0.100	1100	1400	58
WLPN404010M4R7LB	H	4.7	±20%	0.140	950	1200	47
WLPN404010M6R8LB	I	6.8	±20%	0.200	800	1000	38
WLPN404010M100LB	K	10	±20%	0.300	620	750	31
WLPN404010M150LB	M	15	±20%	0.430	540	600	24
WLPN404010M220LB	N	22	±20%	0.570	450	500	19

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



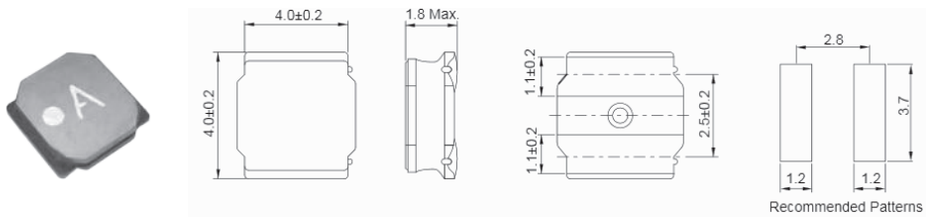


SMD Wire Wound Power Inductor WLPN404018 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN404018

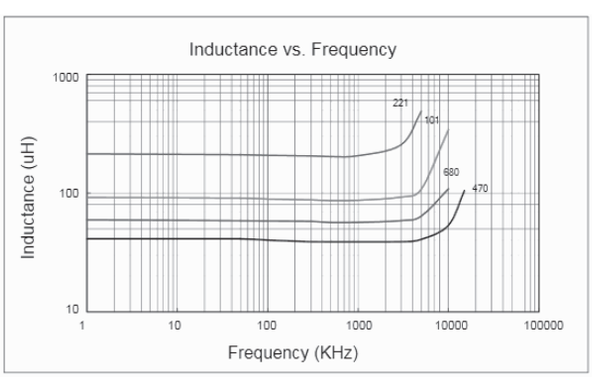


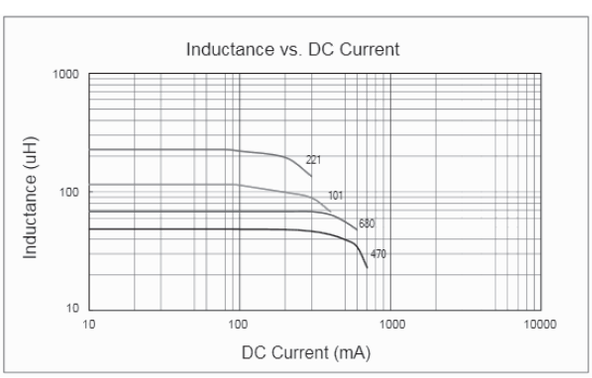
Electrical Specification

Part Number	Inductance @100KHz (uH)	Symbol	Inductance Tolerance	DCR (Ω±20%)	SRF (MHz)Min	Rated Current (mA) Max	
						Saturation Current Idc1	Temperature Rise Current Idc2
WLPN404018N1R0LB	1.0	A	±30%	0.027	90	4000	3200
WLPN404018N1R5LB	1.5	B	±30%	0.037	75	3300	2400
WLPN404018M2R2LB	2.2	C	±20%	0.042	60	3000	2200
WLPN404018M3R3LB	3.3	E	±20%	0.055	45	2300	2000
WLPN404018M4R7LB	4.7	H	±20%	0.070	35	2000	1700
WLPN404018M6R8LB	6.8	I	±20%	0.098	30	1600	1450
WLPN404018M100LB	10	K	±20%	0.150	25	1300	1200
WLPN404018M150LB	15	M	±20%	0.210	18	1100	850
WLPN404018M220LB	22	N	±20%	0.290	15	900	720
WLPN404018M330LB	33	P	±20%	0.460	12	700	550
WLPN404018M470LB	47	S	±20%	0.650	10	600	440
WLPN404018M680LB	68	T	±20%	1.000	8.3	520	320
WLPN404018M101LB	100	V	±20%	1.450	6.5	420	280
WLPN404018M151LB	150	W	±20%	2.300	5.5	340	220
WLPN404018M221LB	220	X	±20%	3.800	4.0	275	170

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



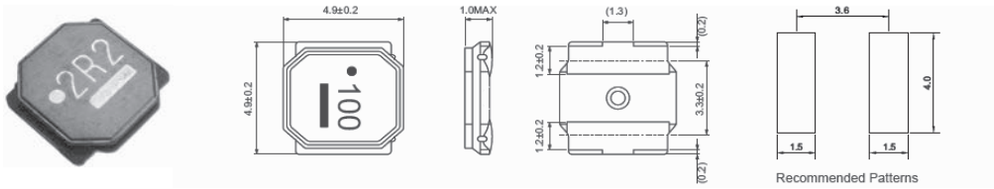


SMD Wire Wound Power Inductor WLPN505010 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN505010

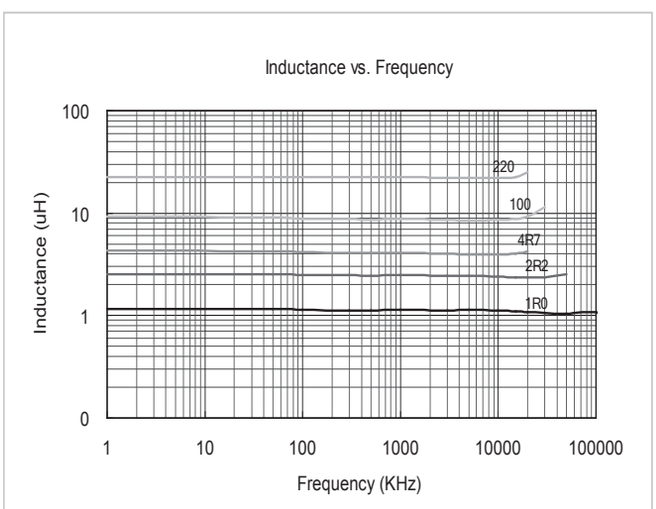


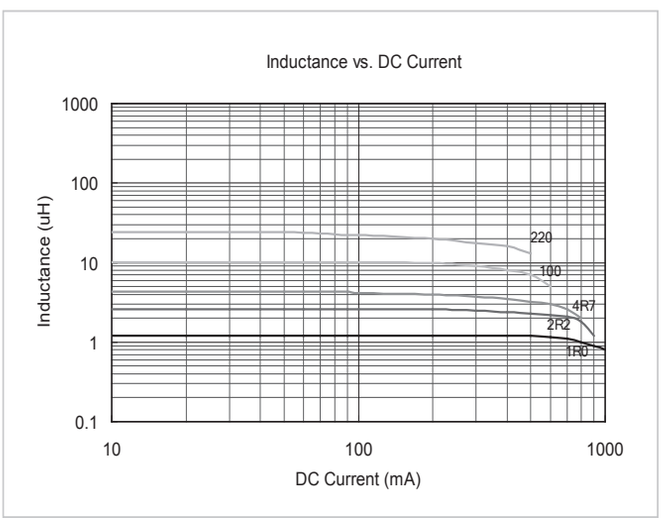
Electrical Specification

Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±20% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
WLPN505010N1R0PB	1R0	1.0	±30%	0.070	2350	1750	95
WLPN505010N2R2PB	2R2	2.2	±30%	0.105	1500	1400	65
WLPN505010M3R3PB	3R3	3.3	±20%	0.125	1400	1250	42
WLPN505010M4R7PB	4R7	4.7	±20%	0.145	1200	1150	37
WLPN505010M6R8PB	6R8	6.8	±20%	0.185	1000	1000	33
WLPN505010M100PB	100	10	±20%	0.250	850	900	23
WLPN505010M150PB	150	15	±20%	0.400	680	650	19
WLPN505010M220PB	220	22	±20%	0.600	550	450	15

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



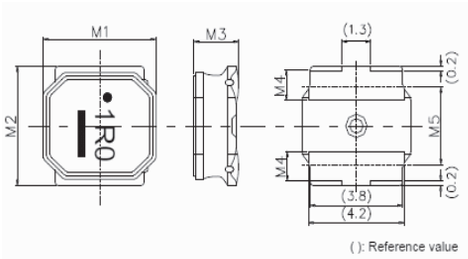


SMD Wire Wound Power Inductor WLPN505020 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

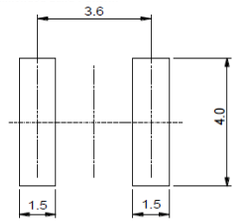
WLPN505020



UNIT : mm

	DIM.	TOL.
M1	4.9	±0.2
M2	4.9	±0.2
M3	2.0	MAX.
M4	1.2	±0.2
M5	3.3	±0.2

Recommended Land-Pattern:



Electrical Specification

Part Number	Inductance @100KHz (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω ± 20%)	SRF (MHz)Min	Rated Current (mA) Max	
						Saturation Current Idc1	Temperature Rise Current Idc2
WLPN505020N1R0PB	1.0	N	100	0.021	81	4000	3600
WLPN505020N1R5PB	1.5	N	100	0.026	68	3350	3200
WLPN505020N2R2PB	2.2	N	100	0.035	57	2900	2900
WLPN505020N3R3PB	3.3	N	100	0.048	46	2400	2400
WLPN505020M4R7PB	4.7	M	100	0.060	37	2000	2000
WLPN505020M6R8PB	6.8	M	100	0.090	30	1600	1650
WLPN505020M100PB	10	M	100	0.120	24	1300	1450
WLPN505020M150PB	15	M	100	0.165	20	1100	1200
WLPN505020M220PB	22	M	100	0.260	17	900	1000

Tolerance: M=±20%, N=±30%

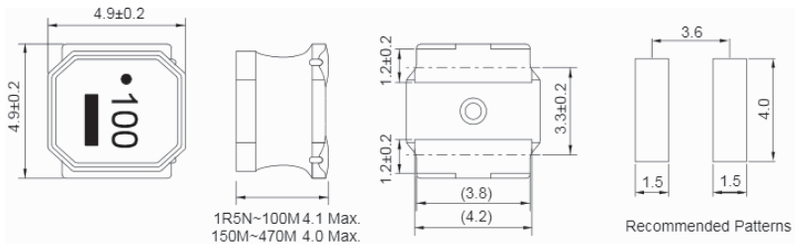
1. Test Frequency: 100 KHz.
2. Test Equipment:
   Inductance: Chroma3302+1320 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise).
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1.

SMD Wire Wound Power Inductor WLPN505040 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN505040

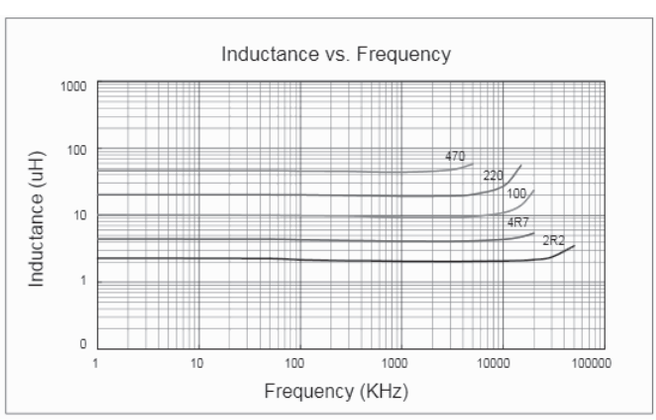


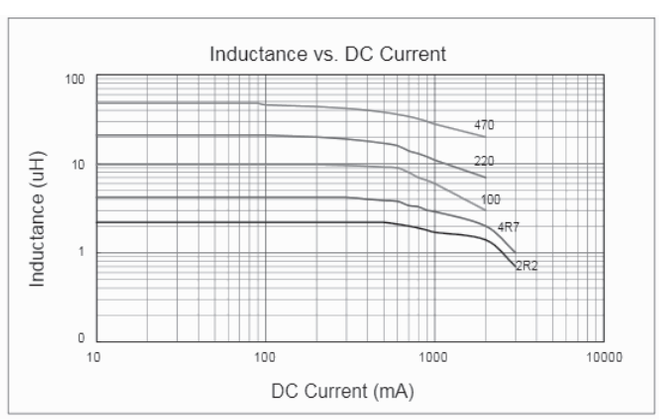
Electrical Specification

Part Number	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) ±20%.	SRF Min. (MHz)	Rated Current (mA)	
						Saturation Current Idc1	Temperature Rise Current Idc2
WLPN505040N1R5LB	1.5	N	100	0.017	60	6400	4500
WLPN505040N2R2LB	2.2	N	100	0.022	42	5000	3700
WLPN505040N3R3LB	3.3	N	100	0.027	32	4000	3300
WLPN505040N4R7LB	4.7	N	100	0.029	28	3300	3100
WLPN505040M6R8LB	6.8	M	100	0.049	21	2800	2400
WLPN505040M100LB	10	M	100	0.056	18	2300	2100
WLPN505040M150LB	15	M	100	0.080	13	2000	1800
WLPN505040M220LB	22	M	100	0.126	9	1500	1400
WLPN505040M330LB	33	M	100	0.180	7	1300	1200
WLPN505040M470LB	47	M	100	0.310	6	1100	900

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz
2. Test Equipment:
   Inductance: Chroma3302+1320+16502, or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



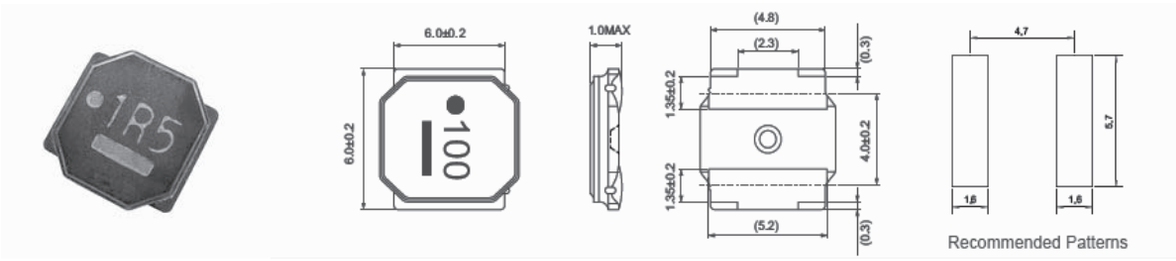


SMD Wire Wound Power Inductor WLPN606010 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN606010

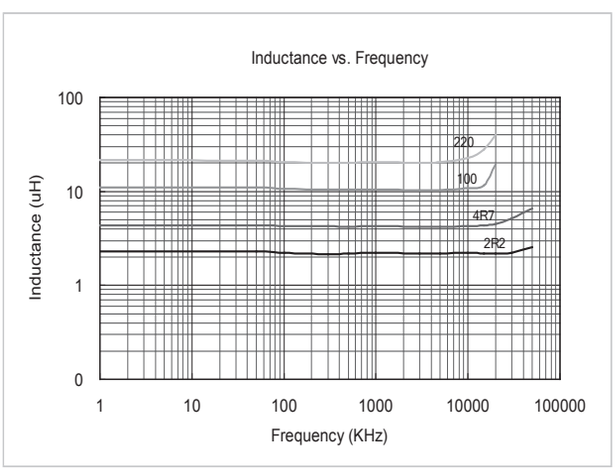


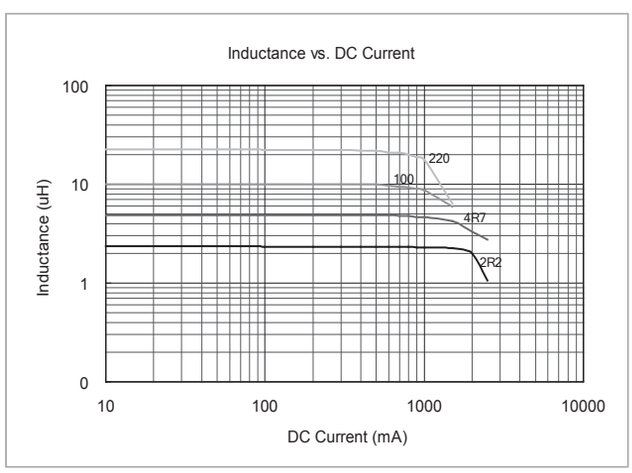
Electrical Specification

Part Number	Marking	Inductance @100KHz (uH)	Inductance Tolerance	DCR ±30% (Ω)	Rated Current (mA)		SRF (MHz) Min.
					Saturation Current Idc1	Temperature Rise Current Idc2	
WLPN606010M1R5PB	1R5	1.5	±20%	0.090	2400	1900	77
WLPN606010M2R2PB	2R2	2.2	±20%	0.110	1900	1700	56
WLPN606010M3R3PB	3R3	3.3	±20%	0.135	1600	1500	42
WLPN606010M4R7PB	4R7	4.7	±20%	0.165	1300	1400	36
WLPN606010M6R8PB	6R8	6.8	±20%	0.220	1200	1200	30
WLPN606010M100PB	100	10	±20%	0.270	1000	1100	25
WLPN606010M220PB	220	22	±20%	0.580	650	700	12

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise)
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



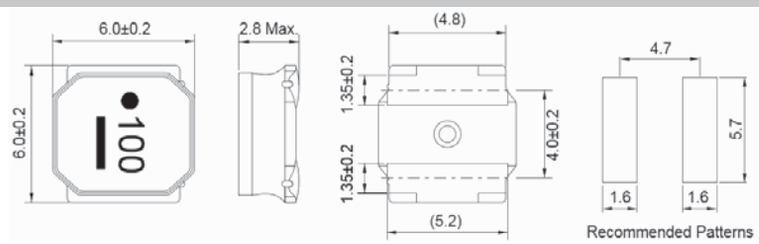


SMD Wire Wound Power Inductor WLPN606028 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN606028

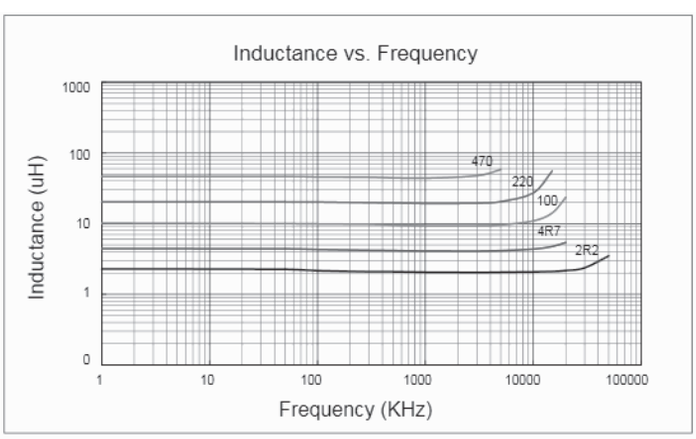


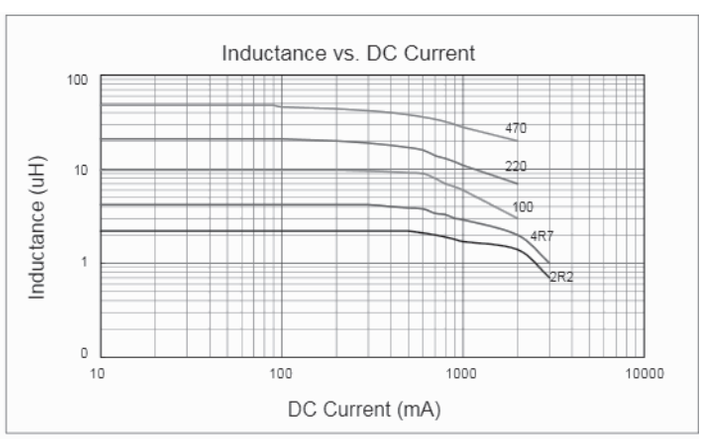
Electrical Specification

WLPN606028 Series	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω ± 30%)	SRF (MHz)Min	Rated Current (mA) Max	
						Saturation Current Idc1	Temperature Rise Current Idc2
WLPN606028NR90LB	0.9	N	100	0.013	90	6700	4600
WLPN606028N1R5LB	1.5	N	100	0.016	78	5100	4200
WLPN606028N2R2LB	2.2	N	100	0.02	68	4200	3700
WLPN606028N3R0LB	3	N	100	0.023	55	3600	3400
WLPN606028M4R7LB	4.7	M	100	0.031	39	2700	3000
WLPN606028M6R0LB	6	M	100	0.04	30	2500	2500
WLPN606028M100LB	10	M	100	0.065	20	1900	1900
WLPN606028M150LB	15	M	100	0.095	17	1600	1800
WLPN606028M220LB	22	M	100	0.135	12	1300	1400
WLPN606028M330LB	33	M	100	0.22	10	1100	1100
WLPN606028M470LB	47	M	100	0.3	8	1000	920
WLPN606028M680LB	68	M	100	0.42	5	800	770
WLPN606028M101LB	100	M	100	0.6	3	650	660

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz.
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   DCR: Chroma16502 or equivalent.
   SRF: HP4291B or equivalent.
3. Saturation Current Idc1: The value of current causes a 30% inductance reduction from initial value.
4. Temperature rise current Idc2: The value of current causes a 40℃ temperature rise.
5. Rated Current: Either Idc1 or Idc2 whichever is smaller.
6. Operating Temperature Range: -25℃ to +125℃ (Including self-temperature rise).
7. Storage Temp. Range: -40℃ to +85℃.
8. MSL: Level 1

Characteristic Curve



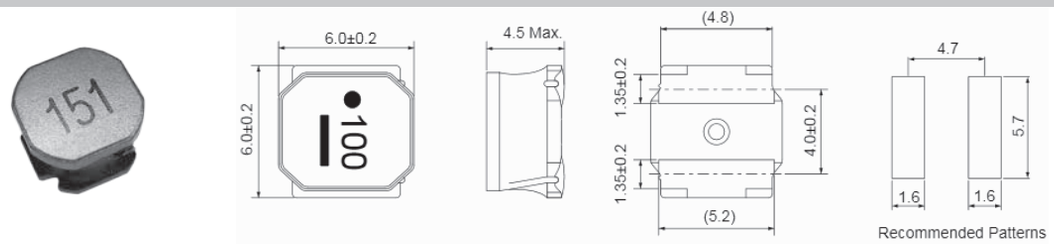


SMD Wire Wound Power Inductor WLPN606045 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN606045

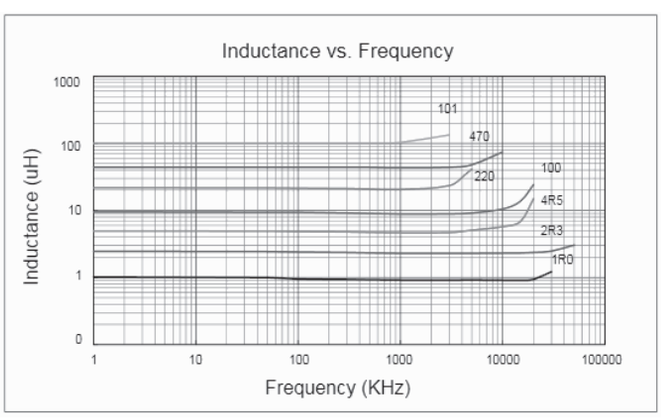


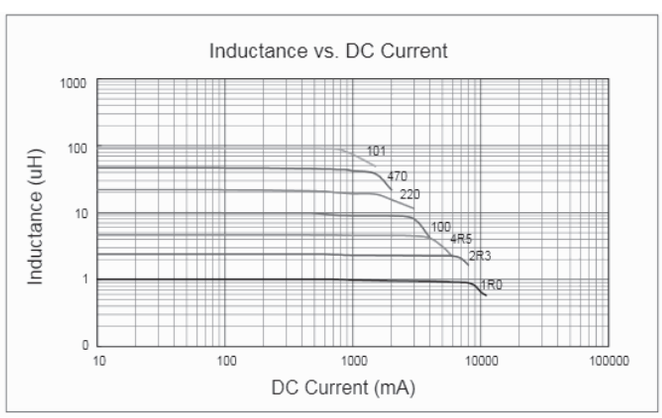
Electrical Specification

WLPN606045 Series	MARK	L (uH)	Inductance Tolerance	Test Freq (KHz)1V	DCR (mΩ)	Irms (A)	Isat (A)
WLPN606045□1R0LB	1R0	1.0	N	100	18.2	6.00	8.50
WLPN606045□1R3LB	1R3	1.3	N	100	20.8	5.20	8.00
WLPN606045□1R5LB	1R5	1.5	N	100	23.4	5.00	8.00
WLPN606045□1R8LB	1R8	1.8	N	100	23.4	5.00	7.00
WLPN606045□2R3LB	2R3	2.3	N	100	27.3	4.50	6.00
WLPN606045□3R0LB	3R0	3.0	N	100	31.2	4.00	5.00
WLPN606045□4R5LB	4R5	4.5	M	100	40.3	3.70	4.00
WLPN606045□4R7LB	4R7	4.7	M	100	40.3	3.70	4.00
WLPN606045□6R3LB	6R3	6.3	M	100	49.4	3.50	3.80
WLPN606045□100LB	100	10.0	M	100	61.1	2.80	3.00
WLPN606045□150LB	150	15.0	M	100	100.1	2.30	2.30
WLPN606045□220LB	220	22.0	M	100	149.5	1.70	1.90
WLPN606045□330LB	330	33.0	M	100	188.5	1.50	1.50
WLPN606045□470LB	470	47.0	M	100	286.0	1.30	1.30
WLPN606045□680LB	680	68.0	M	100	429.0	1.00	1.00
WLPN606045□820LB	820	82.0	M	100	533.0	0.90	0.90
WLPN606045□101LB	101	100.0	M	100	650.0	0.80	0.80

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz, 1V
2. Test Equipment:
   Inductance: Chroma3302+1320+16502 or equivalent.
   SRF: HP-4291B or equivalent.
   RDC: CH16502BC or equivalent.
3. Isat: Based on inductance decrease 30% Max. (at 20℃)
4. Irms: Based on temperature increase 40℃ Max. (at 20℃)
5. Operating Temperature Range: -25℃ to +120℃ (Including self-temperature rise).
6. Storage Temp. Range: -40℃ to +85℃
7. MSL: Level 1

.Characteristic Curve



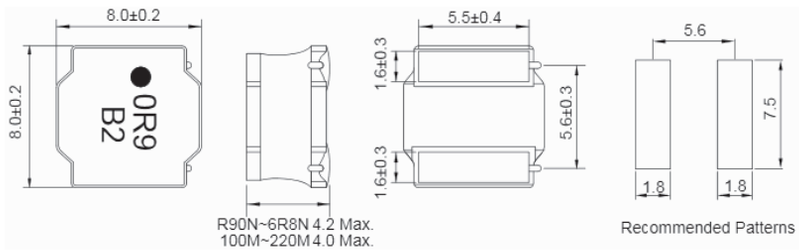


SMD Wire Wound Power Inductor WLPN808042 Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLPN808042

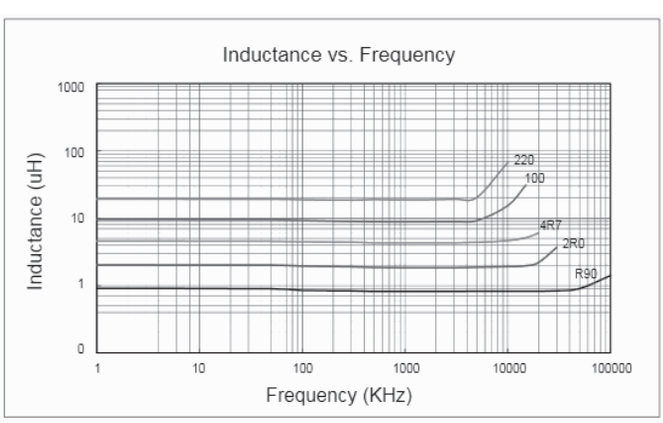


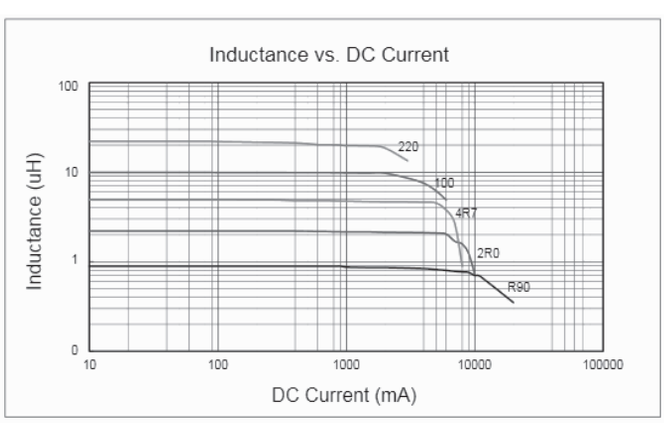
Electrical Specification

WLPN808042 Series	MARK	L (uH)	Inductance Tolerance	Test Freq (KHz)1V	DCR (mΩ)	Irms (A)	Isat (A)
WLPN808042□R90LB	R90	0.9	N	100	8.50	8.00	12.00
WLPN808042□1R4LB	1R4	1.4	N	100	11.00	7.80	10.80
WLPN808042□2R0LB	2R0	2.0	M, N	100	13.20	7.40	9.00
WLPN808042□2R2LB	2R2	2.2	M, N	100	15.60	6.00	7.50
WLPN808042□3R3LB	3R3	3.3	M, N	100	19.50	5.10	7.00
WLPN808042□3R6LB	3R6	3.6	M, N	100	19.50	4.90	6.00
WLPN808042□4R7LB	4R7	4.7	M, N	100	23.40	4.60	5.50
WLPN808042□5R1LB	5R1	5.1	M, N	100	24.70	4.05	4.70
WLPN808042□6R2LB	6R2	6.2	M, N	100	27.30	3.85	4.45
WLPN808042□6R8LB	6R8	6.8	M, N	100	31.20	4.40	5.00
WLPN808042□100LB	100	10.0	M, N	100	45.00	3.80	4.00
WLPN808042□150LB	150	15.0	M, N	100	61.10	2.80	3.00
WLPN808042□220LB	220	22.0	M, N	100	85.80	2.60	2.80
WLPN808042□330LB	330	33.0	M, N	100	120.00	1.80	2.00
WLPN808042□470LB	470	47.0	M, N	100	176.80	1.75	1.90
WLPN808042□680LB	680	68.0	M, N	100	246.00	1.45	1.70
WLPN808042□101LB	101	100	M, N	100	377.00	1.10	1.10

Tolerance: M=±20%, N=±30%
1. Test Frequency: 100 KHz /1V.
2. Test Equipment:
   L: CHROMA-3302+1320. or equivalent.
   SRF: HP-4291B or equivalent.
   RDC: CH16502BC or equivalent.
3. Isat: Based on inductance decrease 30% Max. (at 20℃)
4. Irms: Based on temperature increase 40℃ Max. (at 20℃)
5. Operating temperature range: -25℃ to +120℃ (Including self-temperature rise)
6. Storage Temp.: -40℃ to +85℃.
7. MSL: LEVEL 1.

Characteristic Curve



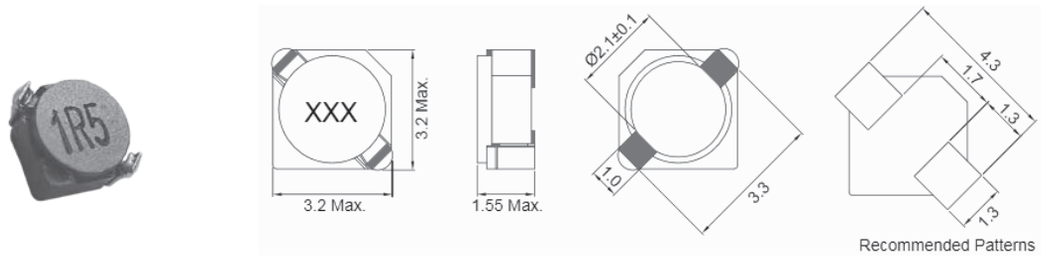


SMD Assembly Wire Wound Power Inductor WLSS214P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS214P

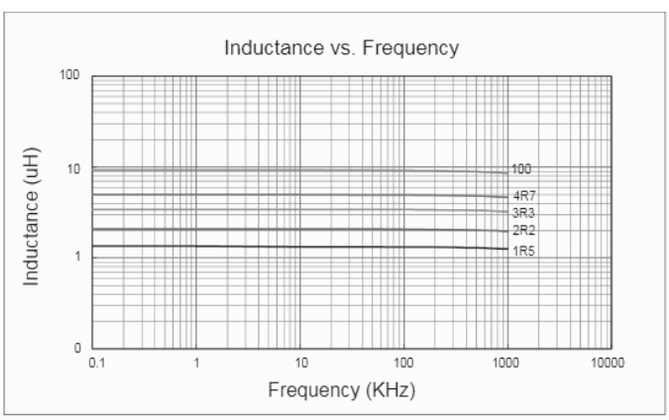


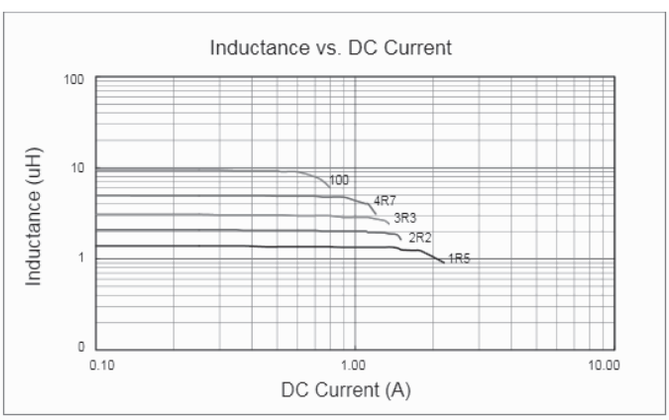
Electrical Specification

WLSS214P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (mA)	Isat (mA)
WLSS214PZ0N1R5PB	1R5	1.5	±30%	100	63	2000	1800
WLSS214PZ0N1R8PB	1R8	1.8	±30%	100	75	1800	1650
WLSS214PZ0N2R2PB	2R2	2.2	±30%	100	94	1600	1500
WLSS214PZ0N2R7PB	2R7	2.7	±30%	100	106	1400	1350
WLSS214PZ0N3R3PB	3R3	3.3	±30%	100	125	1240	1200
WLSS214PZ0N3R9PB	3R9	3.9	±30%	100	138	1120	1100
WLSS214PZ0N4R7PB	4R7	4.7	±30%	100	169	1000	1000
WLSS214PZ0N5R6PB	5R6	5.6	±30%	100	188	980	950
WLSS214PZ0N6R8PB	6R8	6.8	±30%	100	213	920	850
WLSS214PZ0N8R2PB	8R2	8.2	±30%	100	281	800	800
WLSS214PZ0N100PB	100	10	±30%	100	294	760	700
WLSS214PZ0N120PB	120	12	±30%	100	394	640	620

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA 1320 & 3302 & 16502.
e. DCR measured using the 502BC milli-ohm meter.
f. Inductance drops no more than 35% of initial value at rated current, temperature rises Δt<40℃.
※MSL:LEVEL 1

Characteristic Curve



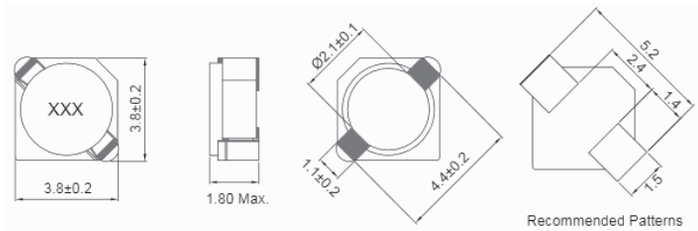


SMD Assembly Wire Wound Power Inductor WLSS316P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS316P

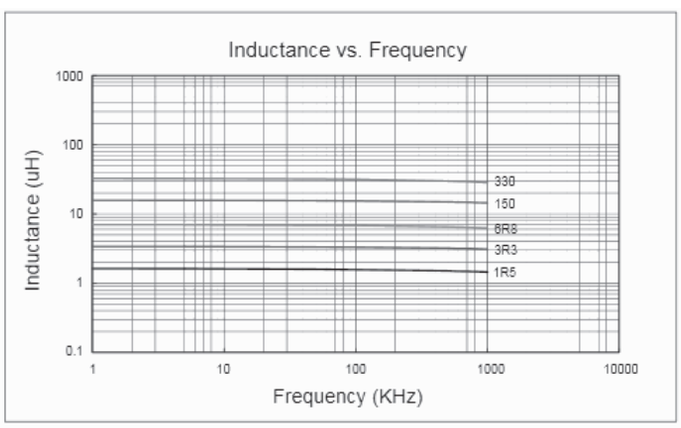


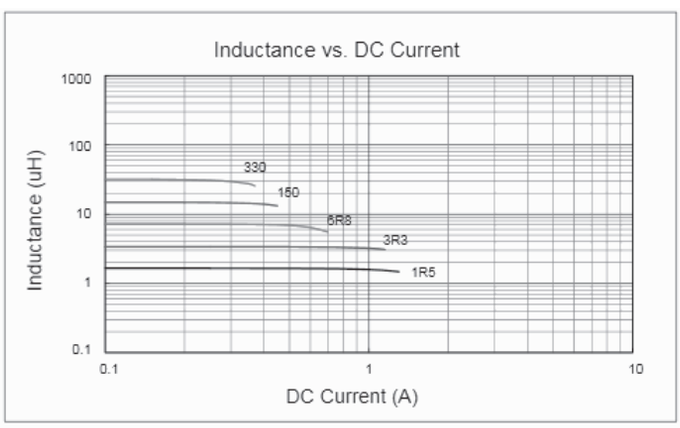
Electrical Specification

WLSS316P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (mA)
WLSS316PZ0N1R5PB	1R5	1.5	± 30%	100	52	1550
WLSS316PZ0N2R2PB	2R2	2.2	± 30%	100	72	1200
WLSS316PZ0N3R3PB	3R3	3.3	± 30%	100	85	1100
WLSS316PZ0N4R7PB	4R7	4.7	± 30%	100	105	900
WLSS316PZ0N6R8PB	6R8	6.8	± 30%	100	170	730
WLSS316PZ0N100PB	100	10.0	± 30%	100	210	550
WLSS316PZ0N150PB	150	15.0	± 30%	100	295	450
WLSS316PZ0N220PB	220	22.0	± 30%	100	430	400
WLSS316PZ0N330PB	330	33.0	± 30%	100	675	320

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10% of initial value at rated current, temperature rises △t< 40℃.
※MSL: LEVEL 1

Characteristic Curve



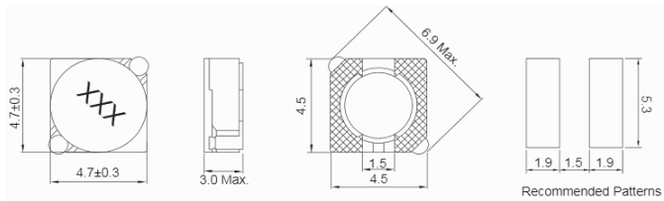


SMD Assembly Wire Wound Power Inductor WLSS428P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS428P

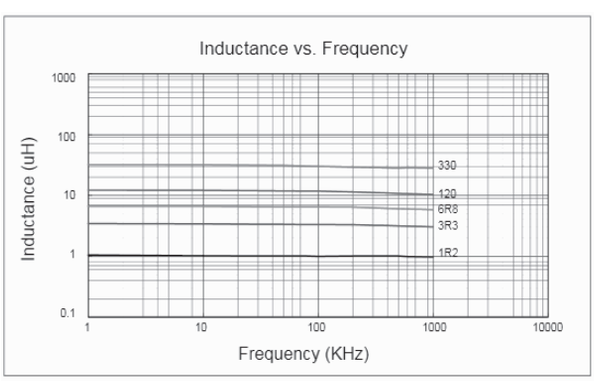


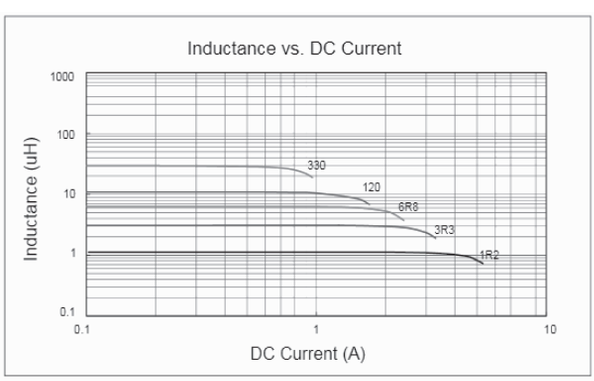
Electrical Specification

WLSS428P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (A)
WLSS428PZ0N1R2PB	1R2	1.2	±30%	100	23.6	2.56
WLSS428PZ0N1R8PB	1R8	1.8	±30%	100	27.5	2.2
WLSS428PZ0N2R2PB	2R2	2.2	±30%	100	31.3	2.04
WLSS428PZ0N2R7PB	2R7	2.7	±30%	100	43.3	1.6
WLSS428PZ0N3R3PB	3R3	3.3	±30%	100	49.2	1.57
WLSS428PZ0N3R9PB	3R9	3.9	±30%	100	64.8	1.44
WLSS428PZ0N4R7PB	4R7	4.7	±30%	100	72	1.32
WLSS428PZ0N5R6PB	5R6	5.6	±30%	100	100.9	1.17
WLSS428PZ0N6R8PB	6R8	6.8	±30%	100	108.9	1.12
WLSS428PZ0N8R2PB	8R2	8.2	±30%	100	117.5	1.04
WLSS428PZ0N100PB	100	10	±30%	100	128.3	1
WLSS428PZ0N120PB	120	12	±30%	100	131.6	0.84
WLSS428PZ0N150PB	150	15	±30%	100	149	0.76
WLSS428PZ0N180PB	180	18	±30%	100	166	0.72
WLSS428PZ0N220PB	220	22	±30%	100	235	0.7
WLSS428PZ0N270PB	270	27	±30%	100	261	0.58
WLSS428PZ0N330PB	330	33	±30%	100	331.3	0.56
WLSS428PZ0N390PB	390	39	±30%	100	383.7	0.5
WLSS428PZ0N470PB	470	47	±30%	100	587	0.48
WLSS428PZ0N560PB	560	56	±30%	100	624.5	0.41
WLSS428PZ0N680PB	680	68	±30%	100	699	0.35
WLSS428PZ0N820PB	820	82	±30%	100	914.8	0.32
WLSS428PZ0N101PB	101	100	±30%	100	1020	0.29
WLSS428PZ0N121PB	121	120	±30%	100	1270	0.27
WLSS428PZ0N151PB	151	150	±30%	100	1350	0.24
WLSS428PZ0N181PB	181	180	±30%	100	1540	0.22

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter,
d. CHROMA 1320 & 3302 & 16502.
e. DCR measured using the 502BC milli-ohm meter.
f. Inductance drops no more than 35% of initial value at rated current, temperature rises Δt<40℃.
※MSL: LEVEL 1

Characteristic Curve



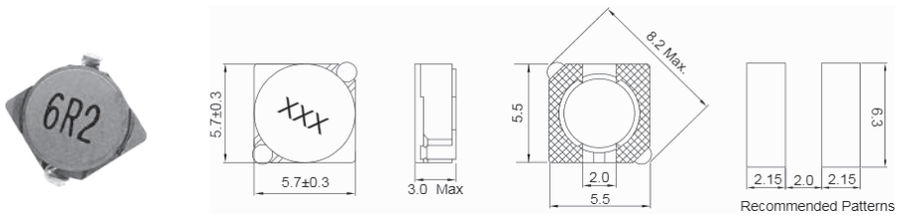


SMD Assembly Wire Wound Power Inductor WLSS528P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS528P

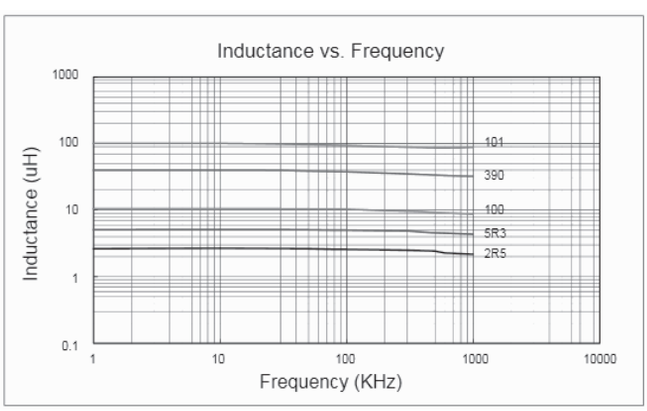


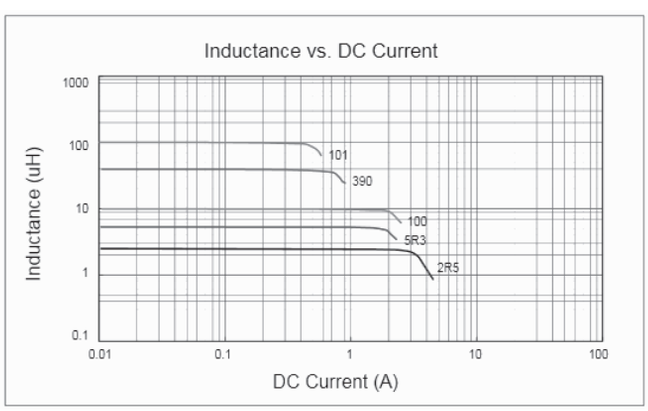
Electrical Specification

WLSS528P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (A)
WLSS528PZ0N2R5LB	2R5	2.5	±30%	10	18	2.60
WLSS528PZ0N3R0LB	3R0	3.0	±30%	10	24	2.40
WLSS528PZ0N4R2LB	4R2	4.2	±30%	10	31	2.20
WLSS528PZ0N5R3LB	5R3	5.3	±30%	10	38	1.90
WLSS528PZ0N6R0LB	6R2	6.2	±30%	10	45	1.80
WLSS528PZ0N8R2LB	8R2	8.2	±30%	10	53	1.60
WLSS528PZ0N100LB	100	10	±30%	10	65	1.30
WLSS528PZ0N120LB	120	12	±30%	10	76	1.20
WLSS528PZ0N150LB	150	15	±30%	10	103	1.10
WLSS528PZ0N180LB	180	18	±30%	10	110	1.00
WLSS528PZ0N220LB	220	22	±30%	10	122	0.90
WLSS528PZ0N270LB	270	27	±30%	10	175	0.85
WLSS528PZ0N330LB	330	33	±30%	10	189	0.75
WLSS528PZ0N390LB	390	39	±30%	10	212	0.70
WLSS528PZ0N470LB	470	47	±30%	10	250	0.62
WLSS528PZ0N560LB	560	56	±30%	10	305	0.58
WLSS528PZ0N680LB	680	68	±30%	10	355	0.52
WLSS528PZ0N820LB	820	82	±30%	10	463	0.46
WLSS528PZ0N101LB	101	100	±30%	10	520	0.42

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA 1320 & 3302 & 16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 35% of initial value at rated current, temperature rises Δt<40℃.
※MSL: LEVEL 1

Characteristic Curve



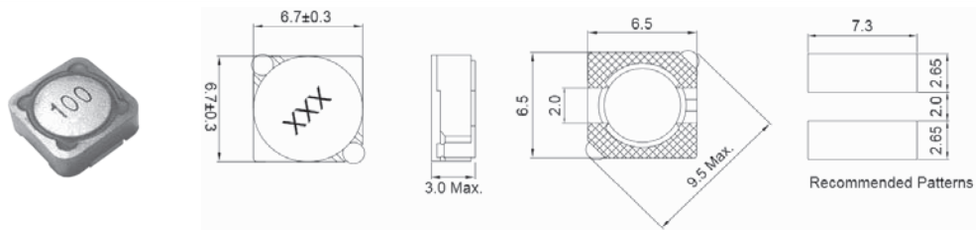


SMD Assembly Wire Wound Power Inductor WLSS628P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS628P

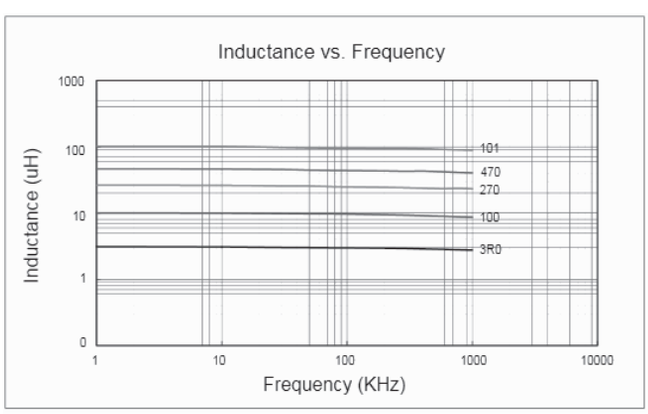


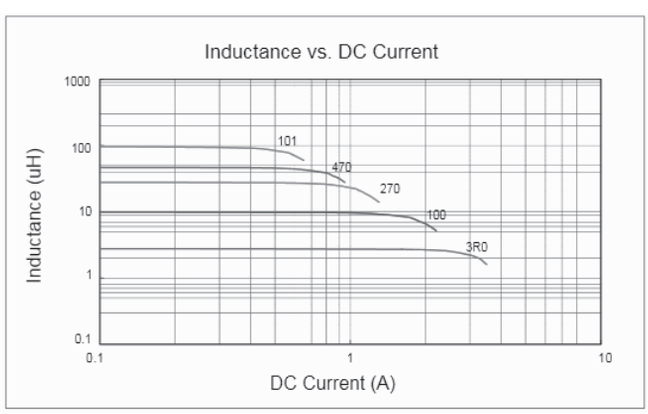
Electrical Specification

WLSS628P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (A)
WLSS628PZ0N3R0LB	3R0	3.0	±30%	10	24	3.00
WLSS628PZ0N3R9LB	3R9	3.9	±30%	10	27	2.60
WLSS628PZ0N5R0LB	5R0	5.0	±30%	10	31	2.40
WLSS628PZ0N6R0LB	6R0	6.0	±30%	10	35	2.25
WLSS628PZ0N7R3LB	7R3	7.3	±30%	10	54	2.1
WLSS628PZ0N8R6LB	8R6	8.6	±30%	10	58	1.85
WLSS628PZ0N100LB	100	10	±30%	10	65	1.70
WLSS628PZ0N120LB	120	12	±30%	10	70	1.55
WLSS628PZ0N150LB	150	15	±30%	10	84	1.40
WLSS628PZ0N180LB	180	18	±30%	10	95	1.32
WLSS628PZ0N220LB	220	22	±30%	10	128	1.2
WLSS628PZ0N270LB	270	27	±30%	10	142	1.05
WLSS628PZ0N330LB	330	33	±30%	10	165	0.97
WLSS628PZ0N390LB	390	39	±30%	10	210	0.86
WLSS628PZ0N470LB	470	47	±30%	10	238	0.80
WLSS628PZ0N560LB	560	56	±30%	10	277	0.73
WLSS628PZ0N680LB	680	68	±30%	10	304	0.65
WLSS628PZ0N820LB	820	82	±30%	10	390	0.60
WLSS628PZ0N101LB	101	100	±30%	10	535	0.54

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA 1320 & 3302 & 16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 35% of initial value at rated current, temperature rises Δt<40℃.
※MSL: LEVEL 1

Characteristic Curve



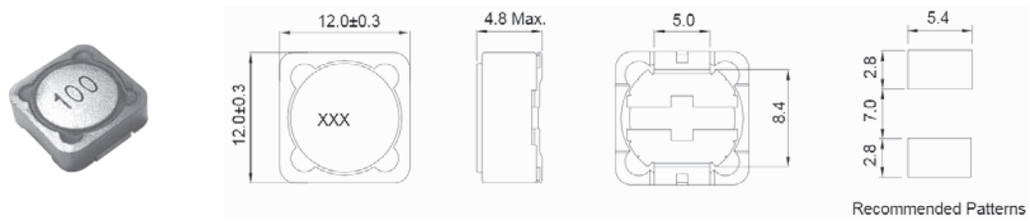


SMD Assembly Wire Wound Power Inductor WLSS124P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS124P

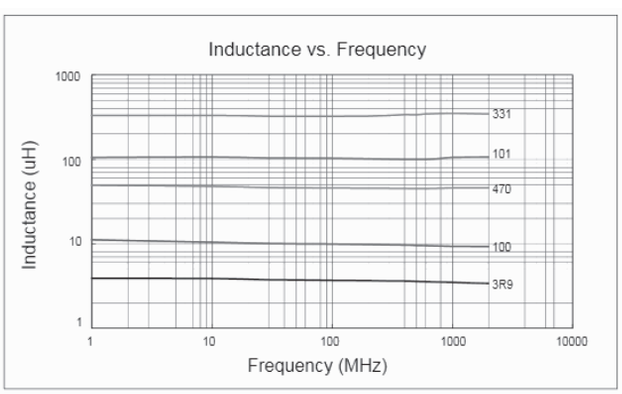


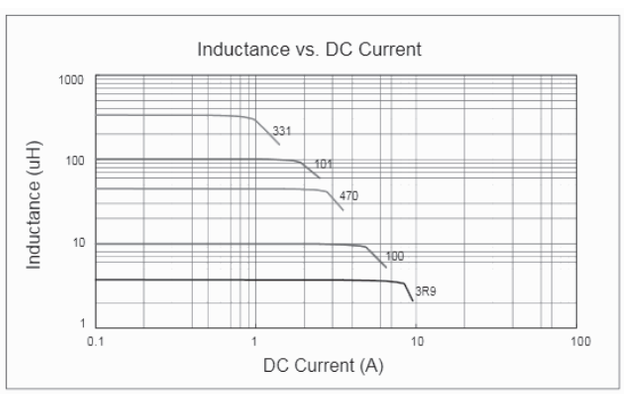
Electrical Specification

WLSS124P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	Rated Current (A)
WLSS124PZ0N3R9LB	3R9	3.9	±20%	100	15	6.50
WLSS124PZ0N4R7LB	4R7	4.7	±20%	100	18	5.70
WLSS124PZ0N6R8LB	6R8	6.8	±20%	100	23	4.90
WLSS124PZ0N8R2LB	8R2	8.2	±20%	100	26	4.60
WLSS124PZ0M100LB	100	10	±20%	100	28	4.50
WLSS124PZ0M120LB	120	12	±20%	100	38	4.00
WLSS124PZ0M150LB	150	15	±20%	100	50	3.20
WLSS124PZ0M180LB	180	18	±20%	100	57	3.10
WLSS124PZ0M220LB	220	22	±20%	100	66	2.90
WLSS124PZ0M270LB	270	27	±20%	100	80	2.80
WLSS124PZ0M330LB	330	33	±20%	100	97	2.70
WLSS124PZ0M390LB	390	39	±20%	100	132	2.10
WLSS124PZ0M470LB	470	47	±20%	100	150	1.90
WLSS124PZ0M560LB	560	56	±20%	100	190	1.80
WLSS124PZ0M680LB	680	68	±20%	100	220	1.50
WLSS124PZ0M820LB	820	82	±20%	100	260	1.30
WLSS124PZ0M101LB	101	100	±20%	100	308	1.20
WLSS124PZ0M121LB	121	120	±20%	100	380	1.10
WLSS124PZ0M151LB	151	150	±20%	100	530	0.95
WLSS124PZ0M181LB	181	180	±20%	100	620	0.85
WLSS124PZ0M221LB	221	220	±20%	100	700	0.80
WLSS124PZ0M271LB	271	270	±20%	100	870	0.60
WLSS124PZ0M331LB	331	330	±20%	100	990	0.50

a. Tolerance: M: ±20%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 25% of initial value at rated current, temperature rises △t< 40℃.
※MSL: LEVEL 1

Characteristic Curve



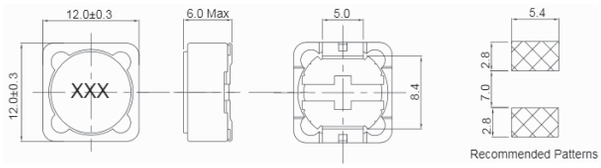


SMD Assembly Wire Wound Power Inductor WLSS125P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS125P

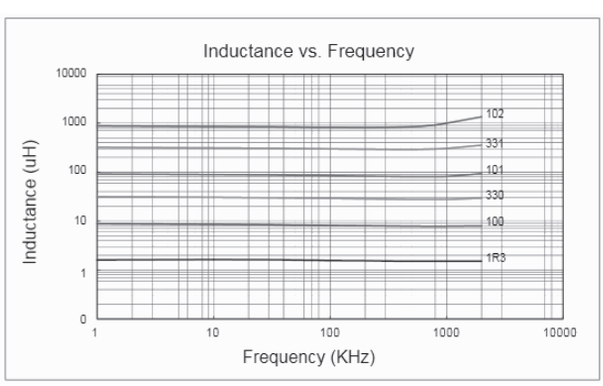


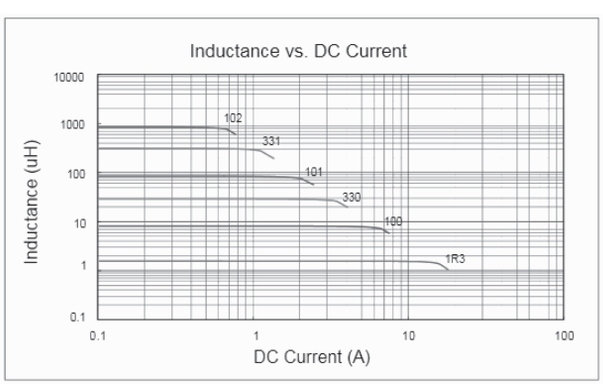
Electrical Specification

WLSS125P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSS125PZ0N1R3LB	1R3	1.3	+30%,-20%	100	0.012	8
WLSS125PZ0N2R1LB	2R1	2.1	+30%,-20%	100	0.014	7
WLSS125PZ0N3R1LB	3R1	3.1	+30%,-20%	100	0.017	6
WLSS125PZ0N4R4LB	4R4	4.4	+30%,-20%	100	0.02	5
WLSS125PZ0N5R8LB	5R8	5.8	+30%,-20%	100	0.021	4.4
WLSS125PZ0N7R5LB	7R5	7.5	+30%,-20%	100	0.024	4.2
WLSS125PZ0M100LB	100	10	±20%	1	0.025	4
WLSS125PZ0M120LB	120	12	±20%	1	0.027	3.5
WLSS125PZ0M150LB	150	15	±20%	1	0.03	3.3
WLSS125PZ0M180LB	180	18	±20%	1	0.034	3
WLSS125PZ0M220LB	220	22	±20%	1	0.036	2.8
WLSS125PZ0M270LB	270	27	±20%	1	0.051	2.3
WLSS125PZ0M330LB	330	33	±20%	1	0.057	2.1
WLSS125PZ0M390LB	390	39	±20%	1	0.068	2
WLSS125PZ0M470LB	470	47	±20%	1	0.075	1.8
WLSS125PZ0M560LB	560	56	±20%	1	0.11	1.7
WLSS125PZ0M680LB	680	68	±20%	1	0.12	1.5
WLSS125PZ0M820LB	820	82	±20%	1	0.14	1.4
WLSS125PZ0M101LB	101	100	±20%	1	0.16	1.3
WLSS125PZ0M121LB	121	120	±20%	1	0.17	1.1
WLSS125PZ0M151LB	151	150	±20%	1	0.23	1
WLSS125PZ0M181LB	181	180	±20%	1	0.29	0.9
WLSS125PZ0M221LB	221	220	±20%	1	0.4	0.8
WLSS125PZ0M271LB	271	270	±20%	1	0.46	0.75
WLSS125PZ0M331LB	331	330	±20%	1	0.51	0.68
WLSS125PZ0M391LB	391	390	±20%	1	0.69	0.65
WLSS125PZ0M471LB	471	470	±20%	1	0.77	0.58
WLSS125PZ0M561LB	561	560	±20%	1	0.86	0.54
WLSS125PZ0M681LB	681	680	±20%	1	1.2	0.48
WLSS125PZ0M821LB	821	820	±20%	1	1.34	0.43
WLSS125PZ0M102LB	102	1000	±20%	1	1.53	0.4

a. Tolerance: N: SPEC, M: ±20%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 25% of initial value at rated current, temperature rises △t< 40℃.
※MSL: LEVEL 1

Characteristic Curve



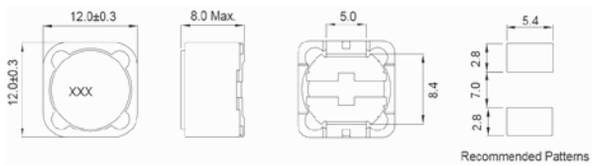


SMD Assembly Wire Wound Power Inductor WLSS127P Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSS127P

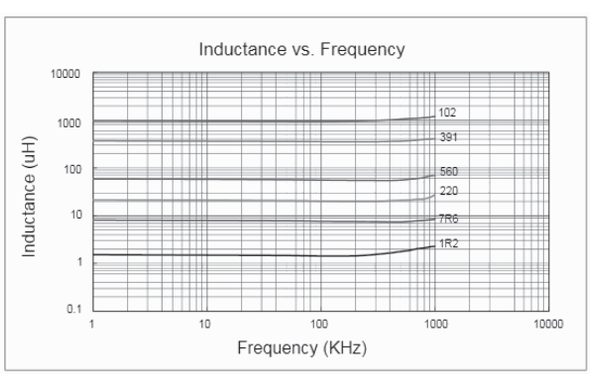


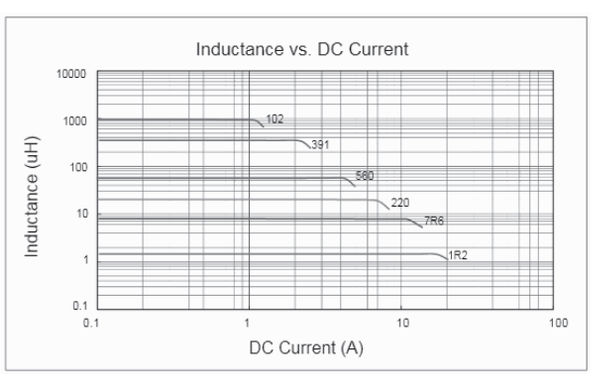
Electrical Specification

WLSS127P Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSS127PZ0N1R2LB	1R2	1.2	+40%-20%	100	0.007	9.8
WLSS127PZ0N2R4LB	2R4	2.4	+40%-20%	100	0.0115	8
WLSS127PZ0N3R5LB	3R5	3.5	+40%-20%	100	0.0135	7.5
WLSS127PZ0N4R7LB	4R7	4.7	+40%-20%	100	0.0158	6.8
WLSS127PZ0N6R1LB	6R1	6.1	+40%-20%	100	0.0176	6.6
WLSS127PZ0N7R6LB	7R6	7.6	+40%-20%	100	0.02	5.9
WLSS127PZ0M100LB	100	10	±20%	1	0.0216	5.4
WLSS127PZ0M120LB	120	12	±20%	1	0.0243	4.9
WLSS127PZ0M150LB	150	15	±20%	1	0.027	4.5
WLSS127PZ0M180LB	180	18	±20%	1	0.0392	3.9
WLSS127PZ0M220LB	220	22	±20%	1	0.0432	3.6
WLSS127PZ0M270LB	270	27	±20%	1	0.0459	3.4
WLSS127PZ0M330LB	330	33	±20%	1	0.0648	3
WLSS127PZ0M390LB	390	39	±20%	1	0.0729	2.75
WLSS127PZ0M470LB	470	47	±20%	1	0.1	2.5
WLSS127PZ0M560LB	560	56	±20%	1	0.11	2.35
WLSS127PZ0M680LB	680	68	±20%	1	0.14	2.1
WLSS127PZ0M820LB	820	82	±20%	1	0.16	1.95
WLSS127PZ0M101LB	101	100	±20%	1	0.22	1.7
WLSS127PZ0M121LB	121	120	±20%	1	0.25	1.6
WLSS127PZ0M151LB	151	150	±20%	1	0.28	1.42
WLSS127PZ0M181LB	181	180	±20%	1	0.35	1.3
WLSS127PZ0M221LB	221	220	±20%	1	0.39	1.16
WLSS127PZ0M271LB	271	270	±20%	1	0.56	1.06
WLSS127PZ0M331LB	331	330	±20%	1	0.64	0.95
WLSS127PZ0M391LB	391	390	±20%	1	0.7	0.88
WLSS127PZ0M471LB	471	470	±20%	1	0.98	0.79
WLSS127PZ0M561LB	561	560	±20%	1	1.07	0.73
WLSS127PZ0M681LB	681	680	±20%	1	1.46	0.67
WLSS127PZ0M821LB	821	820	±20%	1	1.64	0.6
WLSS127PZ0M102LB	102	1000	±20%	1	1.82	0.55

a. Tolerance: N:SPEC, M: ±20%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 25% of initial value at rated current, temperature rises △t< 40℃.
※MSL: LEVEL 1

Characteristic Curve



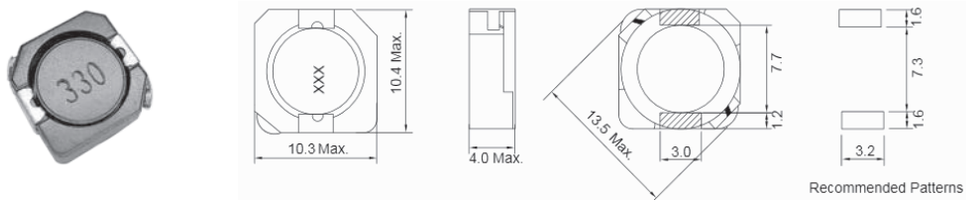


SMD Assembly Wire Wound Power Inductor WLSSA38G Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSSA38G

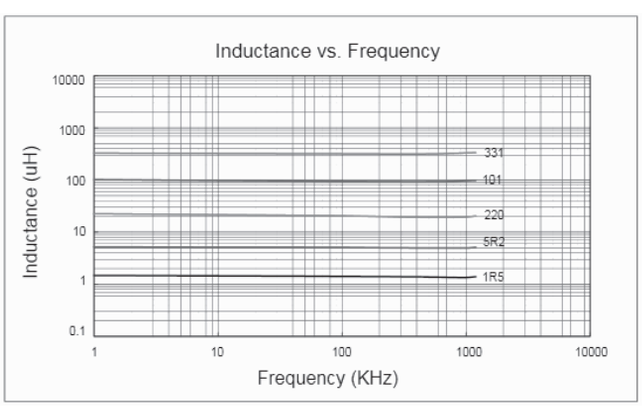


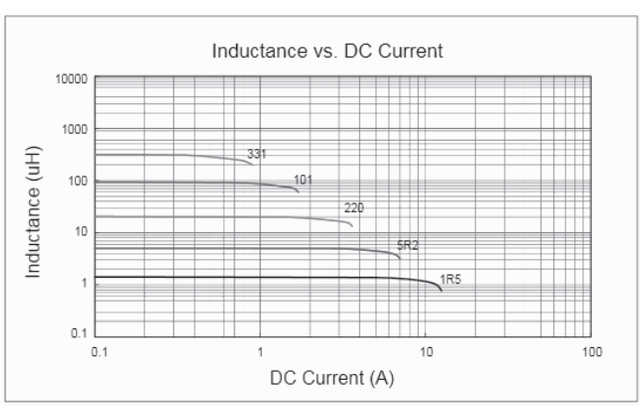
Electrical Specification

WLSSA38G Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	I sat (A)	Rated Current (A)
WLSSA38GZ0N1R5LB	1R5	1.5	±30%	100	8.1	10.0	6.50
WLSSA38GZ0N2R5LB	2R5	2.5	±30%	100	10.5	7.50	6.10
WLSSA38GZ0N3R8LB	3R8	3.8	±30%	100	13.0	6.00	5.50
WLSSA38GZ0N5R2LB	5R2	5.2	±30%	100	22	5.50	5.40
WLSSA38GZ0N6R8LB	6R8	6.8	±30%	100	25	4.80	4.50
WLSSA38GZ0N7R0LB	7R0	7.0	±30%	100	27	4.80	4.50
WLSSA38GZ0N100LB	100	10	±30%	100	35	4.40	3.80
WLSSA38GZ0N150LB	150	15	±30%	100	50	3.60	3.10
WLSSA38GZ0N220LB	220	22	±30%	100	73	2.90	2.50
WLSSA38GZ0N330LB	330	33	±30%	100	93	2.30	2.20
WLSSA38GZ0N470LB	470	47	±30%	100	128	2.10	1.90
WLSSA38GZ0N680LB	680	68	±30%	100	213	1.50	1.42
WLSSA38GZ0N101LB	101	100	±30%	100	304	1.35	1.25
WLSSA38GZ0N151LB	151	150	±30%	100	506	1.15	0.85
WLSSA38GZ0N221LB	221	220	±30%	100	756	0.92	0.70
WLSSA38GZ0N331LB	331	330	±30%	100	1090	0.70	0.52

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 35% of initial value at Isat, temperature rises △t< 30℃ at rated current.
※MSL: LEVEL 1

Characteristic Curve



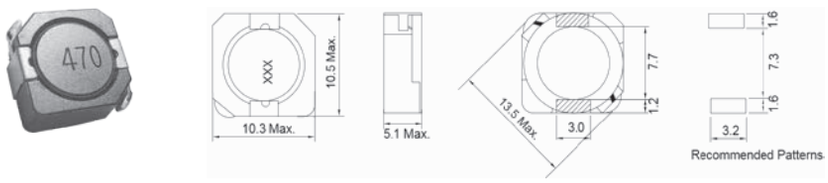


SMD Assembly Wire Wound Power Inductor WLSSA50G Series (SHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSSA50G

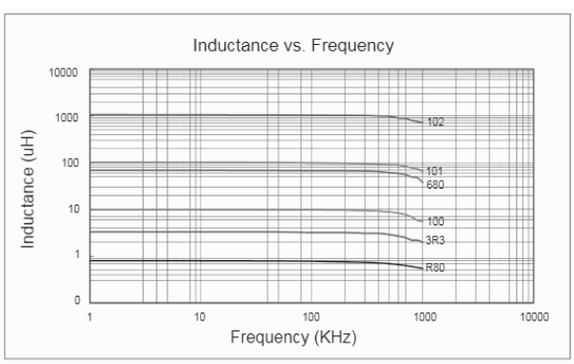


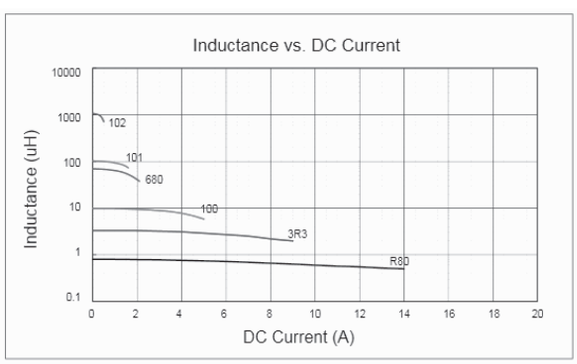
Electrical Specification

WLSSA50G Series	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (mΩ) MAX.	I sat (A)	Rated Current (A)
WLSSA50GZ0NR80LB	R80	0.8	±30%	100	4.3	13.5	9.5
WLSSA50GZ0N1R5LB	1R5	1.5	±30%	100	5.8	10.5	8.3
WLSSA50GZ0N2R2LB	2R2	2.2	±30%	100	7.2	9.25	7.5
WLSSA50GZ0N3R3LB	3R3	3.3	±30%	100	10.4	7.80	6.5
WLSSA50GZ0N4R7LB	4R7	4.7	±30%	100	12.3	6.4	6.1
WLSSA50GZ0N6R8LB	6R8	6.8	±30%	100	18.0	5.4	5.4
WLSSA50GZ0N8R2LB	8R2	8.2	±30%	100	20	4.85	5.0
WLSSA50GZ0N100LB	100	10	±30%	100	26	4.45	4.5
WLSSA50GZ0N120LB	120	12	±30%	100	33	4.0	3.8
WLSSA50GZ0N150LB	150	15	±30%	100	41	3.6	3.4
WLSSA50GZ0N180LB	180	18	±30%	100	46	3.2	3.1
WLSSA50GZ0N220LB	220	22	±30%	100	61	2.95	2.9
WLSSA50GZ0N270LB	270	27	±30%	100	69	2.7	2.6
WLSSA50GZ0N330LB	330	33	±30%	100	84	2.4	2.5
WLSSA50GZ0N390LB	390	39	±30%	100	106	2.3	2.25
WLSSA50GZ0N470LB	470	47	±30%	100	130	2.0	2.0
WLSSA50GZ0N560LB	560	56	±30%	100	149	1.9	1.9
WLSSA50GZ0N680LB	680	68	±30%	100	201	1.65	1.6
WLSSA50GZ0N820LB	820	82	±30%	100	227	1.5	1.45
WLSSA50GZ0N101LB	101	100	±30%	100	253	1.35	1.35
WLSSA50GZ0N121LB	121	120	±30%	100	303	1.28	1.18
WLSSA50GZ0N151LB	151	150	±30%	100	370	1.12	1.1
WLSSA50GZ0N181LB	181	180	±30%	100	419	1.04	1.0
WLSSA50GZ0N221LB	221	220	±30%	100	500	0.94	0.94
WLSSA50GZ0N271LB	271	270	±30%	100	672	0.84	0.8
WLSSA50GZ0N331LB	331	330	±30%	100	812	0.75	0.73
WLSSA50GZ0N391LB	391	390	±30%	100	953	0.7	0.7
WLSSA50GZ0N471LB	471	470	±30%	100	1289	0.6	0.54
WLSSA50GZ0N561LB	561	560	±30%	100	1430	0.54	0.52
WLSSA50GZ0N681LB	681	680	±30%	100	1599	0.52	0.51
WLSSA50GZ0N821LB	821	820	±30%	100	1768	0.5	0.48
WLSSA50GZ0N102LB	102	1000	±30%	100	1989	0.48	0.42

a. Tolerance: N: ±30%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA1320 & 3302 & 16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 35% of initial value at Isat, temperature rises △t< 30℃ at rated current.
※MSL: LEVEL 1

Characteristic Curve



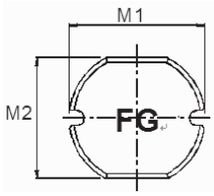


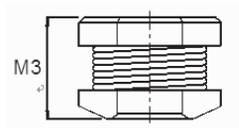
SMD Wire Wound Power Inductor WLSN032D Series (SHIELDED)

Mechanical Dimensions

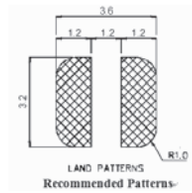
(Unit: mm)

WLSSA50G





	DIM.	TOL.
M1	3.3	±0.3
M2	3.0	±0.3
M3	2.1	±0.3



Electrical Specification

Part Number	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) Max.	Rated Current (A)
WLSN032DZ0M1R0PB	BA	1.0	± 20%	100	0.07	2.080
WLSN032DZ0M1R4PB	BC	1.4	± 20%	100	0.09	1.860
WLSN032DZ0M1R8PB	BE	1.8	± 20%	100	0.11	1.800
WLSN032DZ0M2R2PB	CC	2.2	± 20%	100	0.13	1.390
WLSN032DZ0M2R7PB	CH	2.7	± 20%	100	0.14	1.320
WLSN032DZ0M3R3PB	DD	3.3	± 20%	100	0.20	1.250
WLSN032DZ0M3R9PB	DJ	3.9	± 20%	100	0.21	1.200
WLSN032DZ0M4R7PB	EH	4.7	± 20%	100	0.33	1.030
WLSN032DZ0M5R6PB	FG	5.6	± 20%	100	0.35	0.910
WLSN032DZ0M6R8PB	GI	6.8	± 20%	100	0.38	0.850
WLSN032DZ0M8R2PB	IC	8.2	± 20%	100	0.43	0.820
WLSN032DZ0M100PB	KA	10	± 20%	100	0.50	0.740
WLSN032DZ0M120PB	QA	12	± 20%	100	0.65	0.640
WLSN032DZ0M150PB	MA	15	± 20%	100	0.82	0.600
WLSN032DZ0M180PB	RA	18	± 20%	100	0.90	0.540
WLSN032DZ0M220PB	LA	22	± 20%	100	1.14	0.500
WLSN032DZ0M270PB	SA	27	± 20%	100	1.39	0.430
WLSN032DZ0M330PB	NA	33	± 20%	100	1.55	0.400
WLSN032DZ0M390PB	PA	39	± 20%	100	2.15	0.370
WLSN032DZ0M470PB	OA	47	± 20%	100	2.44	0.360
WLSN032DZ0M560PB	UA	56	± 20%	100	2.68	0.310
WLSN032DZ0M680PB	VA	68	± 20%	100	3.05	0.300
WLSN032DZ0M820PB	XA	82	± 20%	100	3.48	0.280
WLSN032DZ0M221PB	LB	220	± 20%	100	6.30	0.200
WLSN032DZ0M471PB	OB	470	± 20%	100	14.00	0.090

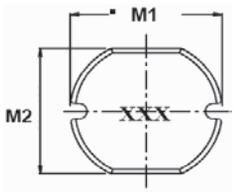
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

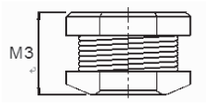
SMD Wire Wound Power Inductor WLSN043D Series (UNSHIELDED)

Mechanical Dimensions

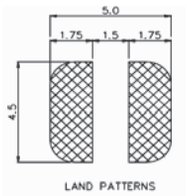
(Unit: mm)

WLSN043D





	DIM.	TOL.
M1	4.5	±0.3
M2	4.0	±0.3
M3	3.2	±0.3



Recommended Patterns

Electrical Specification

Part Number	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN043DZ0M1R0LB	1R0	1.0	± 20%	100	0.0487	2.56
WLSN043DZ0M1R2LB	1R2	1.2	± 20%	100	0.04	2.25
WLSN043DZ0M1R4LB	1R4	1.4	± 20%	100	0.0562	2.52
WLSN043DZ0M1R8LB	1R8	1.8	± 20%	100	0.0637	1.95
WLSN043DZ0M2R2LB	2R2	2.2	± 20%	100	0.0712	1.75
WLSN043DZ0M2R7LB	2R7	2.7	± 20%	100	0.0787	1.58
WLSN043DZ0M3R3LB	3R3	3.3	± 20%	100	0.0862	1.44
WLSN043DZ0M3R9LB	3R9	3.9	± 20%	100	0.0937	1.33
WLSN043DZ0M4R7LB	4R7	4.7	± 20%	100	0.1087	1.15
WLSN043DZ0M5R6LB	5R6	5.6	± 20%	100	0.1257	0.99
WLSN043DZ0M6R8LB	6R8	6.8	± 20%	100	0.1312	0.95
WLSN043DZ0M8R2LB	8R2	8.2	± 20%	100	0.1462	0.84
WLSN043DZ0M100LB	100	10	± 20%	100	0.182	1.04
WLSN043DZ0M120LB	120	12	± 20%	100	0.210	0.97
WLSN043DZ0M150LB	150	15	± 20%	100	0.235	0.85
WLSN043DZ0M180LB	180	18	± 20%	100	0.338	0.74
WLSN043DZ0M220LB	220	22	± 20%	100	0.378	0.68
WLSN043DZ0M270LB	270	27	± 20%	100	0.522	0.62
WLSN043DZ0K330LB	330	33	± 20%	100	0.540	0.56
WLSN043DZ0K390LB	390	39	± 20%	100	0.587	0.52
WLSN043DZ0K470LB	470	47	± 20%	100	0.844	0.44
WLSN043DZ0K560LB	560	56	± 20%	100	0.937	0.42
WLSN043DZ0K680LB	680	68	± 20%	100	1.117	0.37
WLSN043DZ0K331LB	331	330	± 20%	100	3.35	0.1

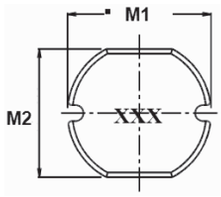
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

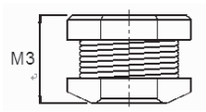
SMD Wire Wound Power Inductor WLSN054D Series (UNSHIELDED)

Mechanical Dimensions

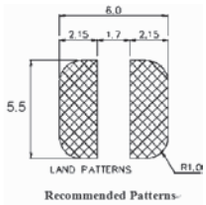
(Unit: mm)

WLSN054D





	DIM.	TOL.
M1	5.8	±0.3
M2	5.2	±0.3
M3	4.5	±0.35



Electrical Specification

Part Number	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN054DZ0M1R0LB	1R0	1.0	± 20%	100	0.015	4.00
WLSN054DZ0M1R9LB	1R9	1.9	± 20%	100	0.039	3.00
WLSN054DZ0M2R2LB	2R2	2.2	± 20%	100	0.020	4.00
WLSN054DZ0M3R3LB	3R3	3.3	± 20%	100	0.021	3.00
WLSN054DZ0M4R7LB	4R7	4.7	± 20%	100	0.028	2.00
WLSN054DZ0M6R8LB	6R8	6.8	± 20%	100	0.042	2.00
WLSN054DZ0M100LB	100	10	± 20%	100	0.10	1.44
WLSN054DZ0M120LB	120	12	± 20%	100	0.12	1.40
WLSN054DZ0M150LB	150	15	± 20%	100	0.14	1.30
WLSN054DZ0M180LB	180	18	± 20%	100	0.15	1.23
WLSN054DZ0M220LB	220	22	± 20%	100	0.18	1.11
WLSN054DZ0M270LB	270	27	± 20%	100	0.20	0.97
WLSN054DZ0L330LB	330	33	± 15%	100	0.23	0.88
WLSN054DZ0L390LB	390	39	± 15%	100	0.32	0.80
WLSN054DZ0L470LB	470	47	±15%	100	0.37	0.72
WLSN054DZ0K560LB	560	56	± 10%	100	0.42	0.68
WLSN054DZ0K680LB	680	68	± 10%	100	0.46	0.61
WLSN054DZ0K820LB	820	82	± 10%	100	0.60	0.58
WLSN054DZ0K101LB	101	100	± 10%	10	0.70	0.52
WLSN054DZ0K121LB	121	120	± 10%	10	0.93	0.48
WLSN054DZ0K151LB	151	150	± 10%	10	1.10	0.40
WLSN054DZ0K181LB	181	180	± 10%	10	1.38	0.38
WLSN054DZ0K221LB	221	220	± 10%	10	1.57	0.35
WLSN054DZ0K271LB	271	270	± 10%	10	1.85	0.30

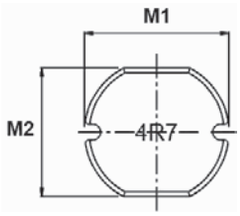
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃

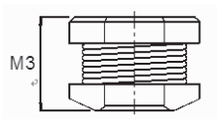
SMD Wire Wound Power Inductor WLSN073D Series (UNSHIELDED)

Mechanical Dimensions

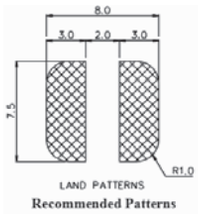
(Unit: mm)

WLSN073D





	DIM.	TOL.
M1	7.8	±0.3
M2	7.0	±0.3
M3	3.5	±0.5



Electrical Specification

Part Number	Marking	L (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN073DZ0M100LB	100	10	± 20%	100	0.0803	1.44
WLSN073DZ0M120LB	120	12	± 20%	100	0.0897	1.39
WLSN073DZ0M150LB	150	15	± 20%	100	0.104	1.24
WLSN073DZ0M180LB	180	18	± 20%	100	0.111	1.12
WLSN073DZ0M220LB	220	22	± 20%	100	0.129	1.07
WLSN073DZ0M270LB	270	27	± 20%	100	0.153	0.94
WLSN073DZ0M330LB	330	33	± 20%	100	0.170	0.85
WLSN073DZ0M390LB	390	39	± 20%	100	0.217	0.74
WLSN073DZ0M470LB	470	47	± 20%	100	0.252	0.68
WLSN073DZ0K560LB	560	56	± 10%	100	0.282	0.64
WLSN073DZ0K680LB	680	68	± 10%	100	0.332	0.59
WLSN073DZ0K820LB	820	82	± 10%	100	0.406	0.54
WLSN073DZ0K101LB	101	100	± 10%	10	0.481	0.51
WLSN073DZ0K121LB	121	120	± 10%	10	0.536	0.49
WLSN073DZ0K151LB	151	150	± 10%	10	0.755	0.40
WLSN073DZ0K181LB	181	180	± 10%	10	1.022	0.36
WLSN073DZ0K221LB	221	220	± 10%	10	1.200	0.31
WLSN073DZ0K271LB	271	270	± 10%	10	1.306	0.29
WLSN073DZ0K331LB	331	330	± 10%	10	1.495	0.28

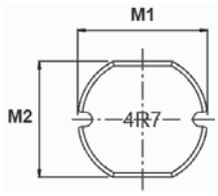
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

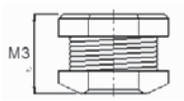
SMD Wire Wound Power Inductor WLSN075D Series (UNSHIELDED)

Mechanical Dimensions

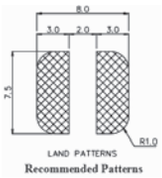
(Unit: mm)

WLSN075D





	DIM.	TOL.
M1	7.8	±0.3
M2	7.0	±0.3
M3	5.0	±0.5



Electrical Specification

WLSN075D Series	Marking	Inductance (uH)	Inductance Tolerance	Test Freq (KHz)	DCR (Ω) MAX.	Rated Current (A)
WLSN075DZ0K6R8LB	6R8	6.8	± 10%	100	0.058	3.0
WLSN075DZ0K8R2LB	8R2	8.2	± 10%	100	0.06	2.4
WLSN075DZ0K100LB	100	10	± 10%	100	0.07	2.30
WLSN075DZ0K120LB	120	12	± 10%	100	0.08	2.00
WLSN075DZ0K150LB	150	15	± 10%	100	0.09	1.80
WLSN075DZ0K180LB	180	18	± 10%	100	0.10	1.60
WLSN075DZ0K220LB	220	22	± 10%	100	0.11	1.50
WLSN075DZ0K270LB	270	27	± 10%	100	0.12	1.30
WLSN075DZ0K330LB	330	33	± 10%	100	0.13	1.20
WLSN075DZ0K390LB	390	39	± 10%	100	0.16	1.10
WLSN075DZ0K470LB	470	47	± 10%	100	0.18	1.10
WLSN075DZ0K560LB	560	56	± 10%	100	0.24	0.94
WLSN075DZ0K680LB	680	68	± 10%	100	0.28	0.85
WLSN075DZ0K820LB	820	82	± 10%	100	0.37	0.78
WLSN075DZ0K101LB	101	100	± 10%	10	0.43	0.72
WLSN075DZ0K121LB	121	120	± 10%	10	0.47	0.66
WLSN075DZ0K151LB	151	150	± 10%	10	0.64	0.58
WLSN075DZ0K181LB	181	180	± 10%	10	0.71	0.51
WLSN075DZ0K221LB	221	220	± 10%	10	0.96	0.49
WLSN075DZ0K271LB	271	270	± 10%	10	1.11	0.42
WLSN075DZ0K331LB	331	330	± 10%	10	1.26	0.40
WLSN075DZ0K391LB	391	390	± 10%	10	1.77	0.36
WLSN075DZ0K471LB	471	470	± 10%	10	1.96	0.34
WLSN075DZ0K202LB	222	2200	± 10%	100	7.2	0.15
WLSN075DZ0K302LB	302	3000	± 10%	1	10.0	0.12
WLSN075DZ0K472LB	472	4700	± 10%	1	21.0	0.08

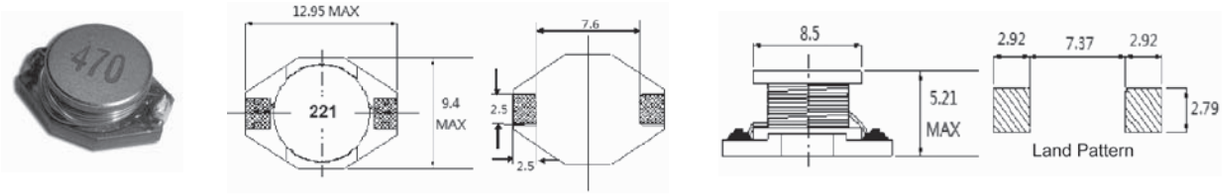
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

SMD Wire Wound Power Inductor WLSN084F Series (UNSHIELDED)

Mechanical Dimensions

(Unit: mm)

WLSN084F



Electrical Specification

Part Number	Marking	Inductance (uH)	TEST FREQ. (KHz)	DCR (Ω) MAX.	I sat (A)	Rated Current (A)
WLSN084FZ0M1R0LB	1R0	1.0	100	0.009	9.00	6.80
WLSN084FZ0M1R5LB	1R5	1.5	100	0.010	8.00	6.40
WLSN084FZ0M2R2LB	2R2	2.2	100	0.012	7.00	6.10
WLSN084FZ0M3R3LB	3R3	3.3	100	0.015	6.40	5.40
WLSN084FZ0M4R7LB	4R7	4.7	100	0.018	5.40	4.80
WLSN084FZ0M6R8LB	6R8	6.8	100	0.027	4.60	4.40
WLSN084FZ0M100LB	100	10.0	100	0.038	3.80	3.90
WLSN084FZ0M150LB	150	15.0	100	0.046	3.00	3.10
WLSN084FZ0M220LB	220	22.0	100	0.085	2.60	2.70
WLSN084FZ0M330LB	330	33.0	100	0.100	2.00	2.10
WLSN084FZ0M470LB	470	47.0	100	0.140	1.60	1.80
WLSN084FZ0M680LB	680	68.0	100	0.200	1.40	1.50
WLSN084FZ0M101LB	101	100.0	100	0.280	1.20	1.30
WLSN084FZ0M151LB	151	150.0	100	0.400	1.00	1.00
WLSN084FZ0M221LB	221	220.0	100	0.610	0.80	0.80
WLSN084FZ0M331LB	331	330.0	100	1.020	0.60	0.60
WLSN084FZ0M471LB	471	470.0	100	1.270	0.50	0.50
WLSN084FZ0M681LB	681	680.0	100	2.020	0.40	0.40
WLSN084FZ0M102LB	102	1000.0	100	3.000	0.30	0.30

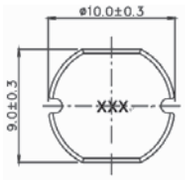
a. Tolerance: M: ±20%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

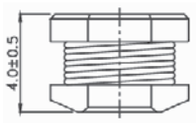
SMD Wire Wound Power Inductor WLSN104D Series (UNSHIELDED)

Mechanical Dimensions

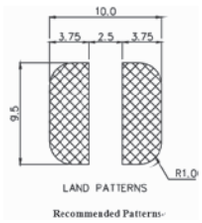
(Unit: mm)

WLSN104D





	DIM.	TOL.
M1	9.0	±0.3
M2	10.0	±0.3
M3	4.0	±0.5



Electrical Specification

Part Number	Marking	Inductance (uH)	Inductance Tolerance	Test Freq (KHz)	DCR MAX. (Ω)	Rated Current (A)
WLSN104DZ0□100LB	100	10	± 10%, ± 20%	100	0.053	2.38
WLSN104DZ0□120LB	120	12	± 10%, ± 20%	100	0.061	2.13
WLSN104DZ0□150LB	150	15	± 10%, ± 20%	100	0.070	1.87
WLSN104DZ0□180LB	180	18	± 10%, ± 20%	100	0.081	1.73
WLSN104DZ0□220LB	220	22	± 10%, ± 20%	100	0.088	1.60
WLSN104DZ0□270LB	270	27	± 10%, ± 20%	100	0.100	1.44
WLSN104DZ0□330LB	330	33	± 10%, ± 20%	100	0.120	1.26
WLSN104DZ0□390LB	390	39	± 10%, ± 20%	100	0.151	1.20
WLSN104DZ0□470LB	470	47	± 10%, ± 20%	100	0.170	1.10
WLSN104DZ0□560LB	560	56	± 10%, ± 20%	100	0.199	1.01
WLSN104DZ0□680LB	680	68	± 10%, ± 20%	100	0.223	0.91
WLSN104DZ0□820LB	820	82	± 10%, ± 20%	100	0.252	0.85
WLSN104DZ0□101LB	101	100	± 10%, ± 20%	10	0.344	0.74
WLSN104DZ0□121LB	121	120	± 10%, ± 20%	10	0.396	0.69
WLSN104DZ0□151LB	151	150	± 10%, ± 20%	10	0.544	0.61
WLSN104DZ0□181LB	181	180	± 10%, ± 20%	10	0.621	0.56
WLSN104DZ0□221LB	221	220	± 10%, ± 20%	10	0.721	0.53
WLSN104DZ0□271LB	271	270	± 10%, ± 20%	10	0.949	0.45
WLSN104DZ0□331LB	331	330	± 10%, ± 20%	10	1.100	0.42
WLSN104DZ0□391LB	391	390	± 10%, ± 20%	10	1.245	0.38
WLSN104DZ0□471LB	471	470	± 10%, ± 20%	10	1.526	0.35
WLSN104DZ0□561LB	561	560	± 10%, ± 20%	10	1.904	0.32
WLSN104DZ0□102LB	102	1000	± 10%, ± 20%	1	3.800	0.16

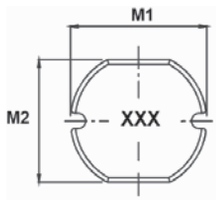
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temperature Range: -25℃ to +105℃ (Including self-generated heat)
c. Inductance measured using the HP4284A; Chroma 3302+1320.
d. DCR measured using the 16502 milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at rated current ,temperature rises △t< 40℃
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL

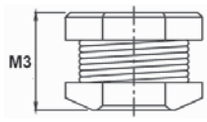
SMD Wire Wound Power Inductor WLSN105D Series (UNSHIELDED)

Mechanical Dimensions

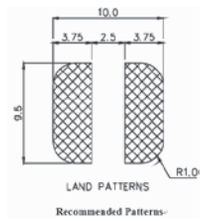
(Unit: mm)

WLSN105D





	DIM.	TOL.
M1	10.0	±0.4
M2	9.0	±0.4
M3	5.4	±0.4



Electrical Specification

Part Number	Marking	Inductance (uH)	Inductance Tolerance	Test Freq (KHz)	DCR MAX. (Ω)	Rated Current (A)
WLSN105DZ0□100LB	100	10	K, M	100	0.06	2.60
WLSN105DZ0□120LB	120	12	K, M	100	0.07	2.45
WLSN105DZ0□150LB	150	15	K, M	100	0.08	2.27
WLSN105DZ0□180LB	180	18	K, M	100	0.09	2.15
WLSN105DZ0□220LB	220	22	K, M	100	0.10	1.95
WLSN105DZ0□270LB	270	27	K, M	100	0.11	1.76
WLSN105DZ0□330LB	330	33	K, M	100	0.12	1.50
WLSN105DZ0□390LB	390	39	K, M	100	0.14	1.37
WLSN105DZ0□470LB	470	47	K, M	100	0.17	1.28
WLSN105DZ0□560LB	560	56	K, M	100	0.19	1.17
WLSN105DZ0□680LB	680	68	K, M	100	0.22	1.11
WLSN105DZ0□820LB	820	820	K, M	100	0.25	1.00
WLSN105DZ0□101LB	101	100	K, M	10	0.35	0.97
WLSN105DZ0□121LB	121	120	K, M	10	0.40	0.89
WLSN105DZ0□151LB	151	150	K, M	10	0.47	0.78
WLSN105DZ0□181LB	181	180	K, M	10	0.63	0.72
WLSN105DZ0□221LB	221	220	K, M	10	0.73	0.66
WLSN105DZ0□271LB	271	270	K, M	10	0.97	0.57
WLSN105DZ0□331LB	331	330	K, M	10	1.15	0.52
WLSN105DZ0□391LB	391	390	K, M	10	1.30	0.48
WLSN105DZ0□471LB	471	470	K, M	10	1.48	0.42
WLSN105DZ0□561LB	561	560	K, M	10	1.90	0.33
WLSN105DZ0□681LB	681	680	K, M	10	2.25	0.28
WLSN105DZ0□821LB	821	820	K, M	10	2.55	0.24

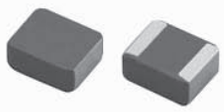
a. Tolerance: M: ±20%, K: ±10%
b. Operating Temp: -25℃ to +105℃.
c. Inductance measured using the HP4284A LCR meter, CHROMA3302/1320/16502.
d. DCR measured using the 502BC milli-ohm meter.
e. Inductance drops no more than 10 % of initial value at Isat , temperature rises △t< 40℃ at rated current.
f. Storage Temperature Range: -40℃ to +85℃
※MSL: LEVEL 1

SMD Molded Power Choke WLPH201610_P Series

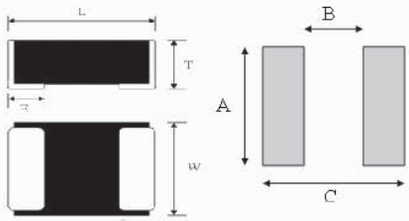
Mechanical Dimensions

(Unit: mm)

WLPH201610_P



Code	Dimensions(mm)
L	2.0 ± 0.2
W	1.6 ± 0.2
T	1.0 MAX.
e	0.5 ±0.3



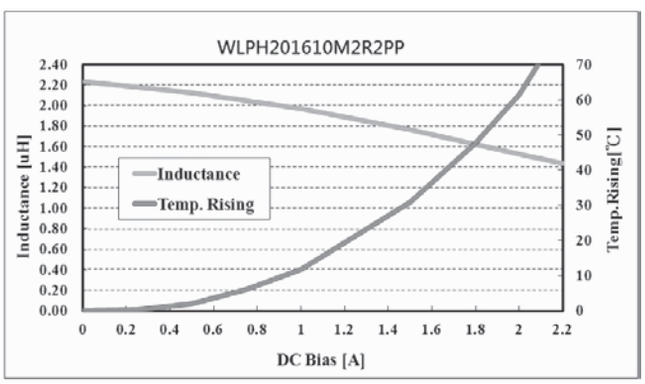
A [mm]	B [mm]	C [mm]
1.6	0.9	2.0

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH201610MR33PP	0.33	20	(24) 29	5	4.5	4.1	3.69
WLPH201610MR47PP	0.47	20	(33) 40	4.4	4	3.5	3.15
WLPH201610MR68PP	0.68	20	(41) 49	3.7	3.33	3.4	3.06
WLPH201610M1R0PP	1.0	20	(60) 69	2.9	2.61	2.6	2.26
WLPH201610M1R5PP	1.5	20	(114) 129	2.5	2.25	2	1.81
WLPH201610M2R2PP	2.2	20	(135) 150	1.9	1.71	1.7	1.50

Characteristic Curve (2R2)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5. DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

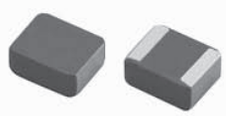
Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

SMD Molded Power Choke WLPH201610_S Series

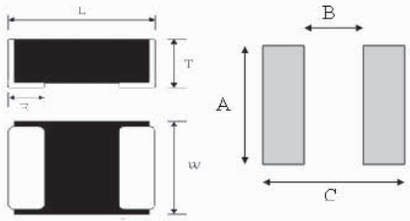
Mechanical Dimensions

(Unit: mm)

WLPH201610_S



Code	Dimensions(mm)
L	2.0 ± 0.2
W	1.6 ± 0.2
T	1.0 MAX.
e	0.5 ±0.3



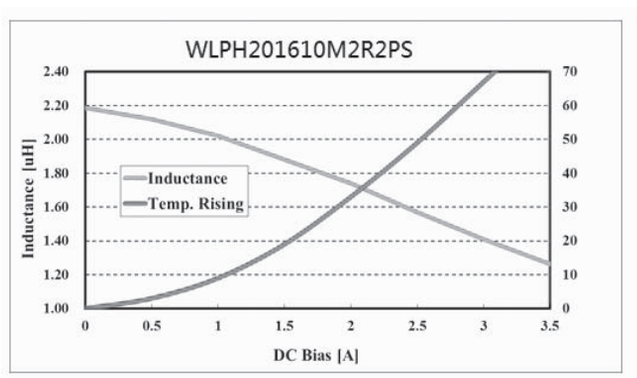
A [mm]	B [mm]	C [mm]
1.6	0.9	2.0

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH201610MR47PS	0.47	20	(23) 30	6.1	5.3	4.5	4.05
WLPH201610M1R0PS	1	20	(48) 60	3.9	3.3	3.2	3.0
WLPH201610M1R5PS	1.5	20	(86) 99	3.4	3.1	2.4	2.2
WLPH201610M2R2PS	2.2	20	(117) 140	2.6	2.45	2.2	2.0

Characteristic Curve (2R2)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5. DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

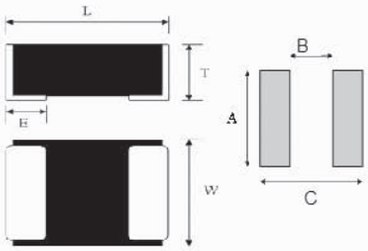
SMD Molded Power Choke WLPH252010_P Series

Mechanical Dimensions

(Unit: mm)

WLPH252010_P

Code	Dimensions(mm)
L	2.5 ± 0.2
W	2.0 ± 0.2
T	1.0 MAX.
e	0.6 ±0.3



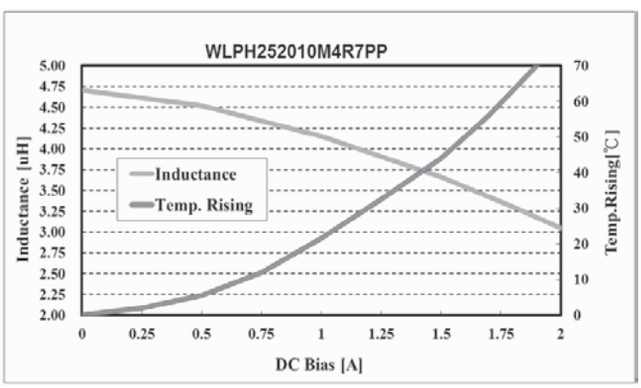
A [mm]	B [mm]	C [mm]
2.0	1.2	2.8

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH252010MR22PP	0.22	20	(9) 12.5	7.9	7.2	5.9	5.3
WLPH252010MR33PP	0.33	20	(21) 26	6.6	6.0	4.4	4.0
WLPH252010MR47PP	0.47	20	(27) 32	5	4.5	3.9	3.5
WLPH252010MR68PP	0.68	20	(37) 44	4.3	3.87	3.4	3.06
WLPH252010M1R0PP	1.0	20	(45) 54	3.5	3.15	3.0	2.70
WLPH252010M1R5PP	1.5	20	(76) 91	2.6	2.34	2.5	2.25
WLPH252010M2R2PP	2.2	20	(99)119	2.4	2.16	2.3	2.07
WLPH252010M4R7PP	4.7	20	(220)262	1.8	1.62	1.36	1.22

Characteristic Curve (4R7)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5. DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

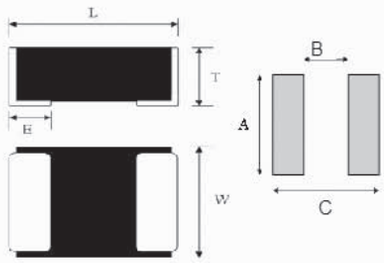
SMD Molded Power Choke WLPH252010_S Series

Mechanical Dimensions

(Unit: mm)

WLPH252010_S

Code	Dimensions(mm)
L	2.5 ± 0.2
W	2.0 ± 0.2
T	1.0 MAX.
e	0.6 ±0.3



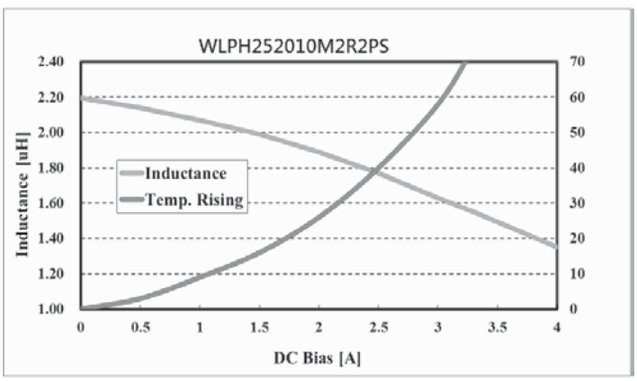
A [mm]	B [mm]	C [mm]
2.0	1.2	2.8

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH252010MR33PS	0.33	20	(17) 22	7.8	7.0	5.6	4.8
WLPH252010MR47PS	0.47	20	(23) 29	6.6	6.0	5.2	4.4
WLPH252010M1R0PS	1	20	(41) 52	4.4	4.0	3.4	3.1
WLPH252010M2R2PS	2.2	20	(88)110	3.3	3.0	2.4	2.1

Characteristic Curve (2R2)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5: DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

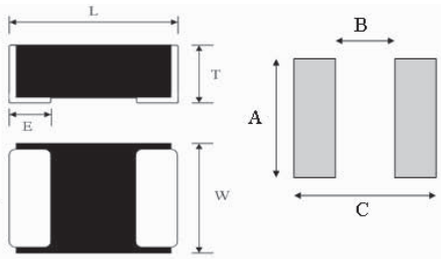
SMD Molded Power Choke WLPH252012_P Series

Mechanical Dimensions

(Unit: mm)

WLPH252012_P

Code	Dimensions(mm)
L	2.5 ± 0.2
W	2.0 ± 0.2
T	1.2 MAX.
e	0.6 ±0.3



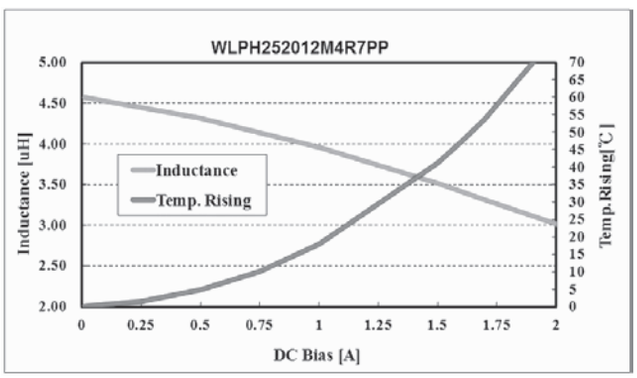
A [mm]	B [mm]	C [mm]
2.0	1.2	2.8

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH252012MR47PP	0.47	20	(21) 25	5.3	4.95	4.6	4.18
WLPH252012MR68PP	0.68	20	(29) 35	5	4.63	3.7	3.36
WLPH252012M1R0PP	1.0	20	(41) 49	4.4	4.04	3.5	3.18
WLPH252012M1R5PP	1.5	20	(64) 77	3.2	2.91	2.5	2.27
WLPH252012M2R2PP	2.2	20	(85) 98	3	2.73	2.27	2.06
WLPH252012M4R7PP	4.7	20	(196) 235	1.9	1.58	1.61	1.4

Characteristic Curve (4R7)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5. DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

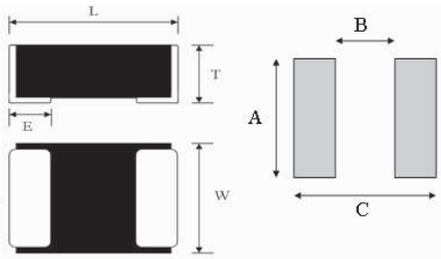
SMD Molded Power Choke WLPH252012_S Series

Mechanical Dimensions

(Unit: mm)

WLPH252012_S

Code	Dimensions(mm)
L	2.5 ± 0.2
W	2.0 ± 0.2
T	1.2 MAX.
e	0.6 ±0.3



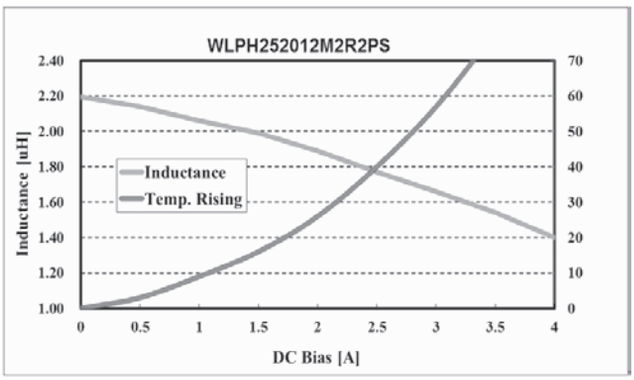
A [mm]	B [mm]	C [mm]
2.0	1.2	2.8

(Unit: mm)

Electrical Specification

Walsin Part Number	L(uH)	Tolerance (±%)	RDC DC Resistance (Ω) (Typ) Max	Isat[A] Saturation Current		Irms[A] Heat Rating Current	
				Typ	Max	Typ	Max
WLPH252012MR47PS	0.47	20	(16) 22	6.8	6.2	5.8	4.9
WLPH252012M1R0PS	1.0	20	(36) 44	4.8	4.3	3.9	3.3
WLPH252012M2R2PS	2.2	20	(74) 89	3.5	3.2	2.5	2.2

Characteristic Curve (2R2)



1. Customized design is available, please contact us.
2. All test referenced to 26℃ ambient
3. Inductance tolerance +/- 20%
4. Inductance is measured with Agilent® LCR meter 4285A (or equivalent) at 1MHz/1V.
5. DC resistance is measured with HIOKI® micro-ohm meter RM3542 or equivalent.
6. Isat means that DC current will cause a 30% inductance reduction from initial value.
7. Irms means that DC current will cause coil temp. rising to 40℃ whichever is smaller.

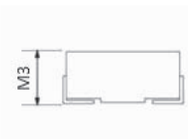
Operating Temperature range :-40℃ to +125℃
Storage Temperature range :-50℃ to +125℃

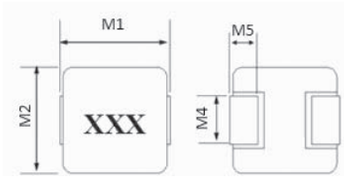
SMD Molded Power Choke WLPM444220 Series

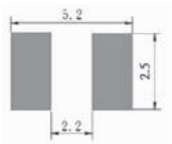
Mechanical Dimensions

(Unit: mm)

WLPM444220







Recommend Pattern

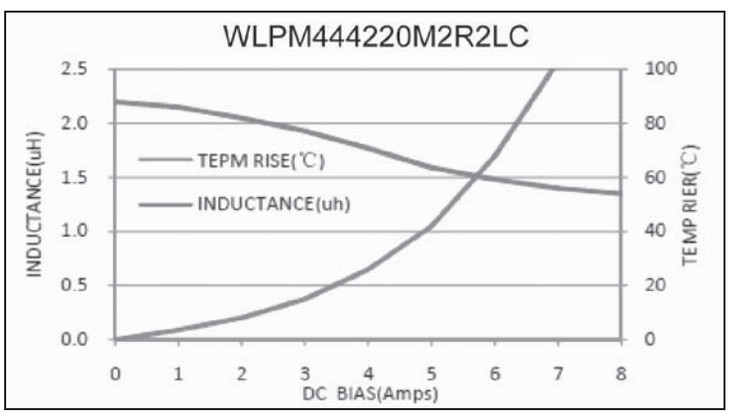
	DIM.	TOL.
M1	4.45	±0.25
M2	4.0	±0.3
M3	1.8	±0.2
M4	1.5	±0.3
M5	0.8	±0.3

Electrical Specification

Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (kHz),0.5V	RDC Maximum (mΩ)		Rated Current Typical (A)	I sat Typical (A)
				TYP.	MAX.		
WLPM444220MR10LC	0.10	±20%	100	3.5	4.0	12.0	22.0
WLPM444220MR22LC	0.22	±20%	100	6.0	6.6	9.0	12.5
WLPM444220MR33LC	0.33	±20%	100	9.6	13.0	8.0	12.0
WLPM444220MR47LC	0.47	±20%	100	12.5	14.0	7.0	9.5
WLPM444220MR56LC	0.56	±20%	100	14.0	16.0	6.5	10.0
WLPM444220MR68LC	0.68	±20%	100	16.0	18.0	6.0	9.0
WLPM444220M1R0LC	1.0	±20%	100	24.0	27.0	4.5	7.0
WLPM444220M1R2LC	1.2	±20%	100	24.0	27.0	4.5	7.0
WLPM444220M1R5LC	1.5	±20%	100	38.0	46.0	4.0	6.0
WLPM444220M2R2LC	2.2	±20%	100	52.0	58.0	3.0	5.0
WLPM444220M3R3LC	3.3	±20%	100	74.0	87.0	2.5	4.0
WLPM444220M4R7LC	4.7	±20%	100	98.0	110.0	2.2	3.5
WLPM444220M5R6LC	5.6	±20%	100	105.0	115.0	1.8	3.5
WLPM444220M6R8LC	6.8	±20%	100	160.0	175.0	1.5	2.5
WLPM444220M100LC	10	±20%	100	256.0	282.0	1.2	2.2

TEST INSTRUMENT: CHROMA 16502, Zentech1320 + Zentech 3305

Characteristic Curve (2R2)



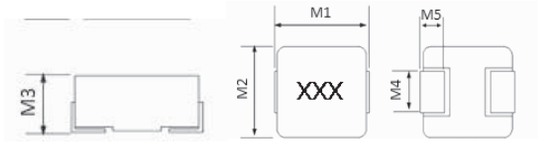
1. Test Freq: 100 KHz, 0.5V
2. All test data is referenced to 25℃ ambient.
3. Operating Temperature Range: -55℃ to +125℃.
4. Rated Current: DC current (A) that will cause an approximate△T of 40℃.
5. I sat: DC current (A) that will cause Lo to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified.

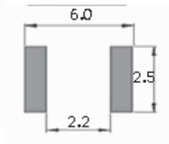
SMD Molded Power Choke WLPM545230 Series

Mechanical Dimensions

(Unit: mm)

WLPM545230





Recommend Pattern

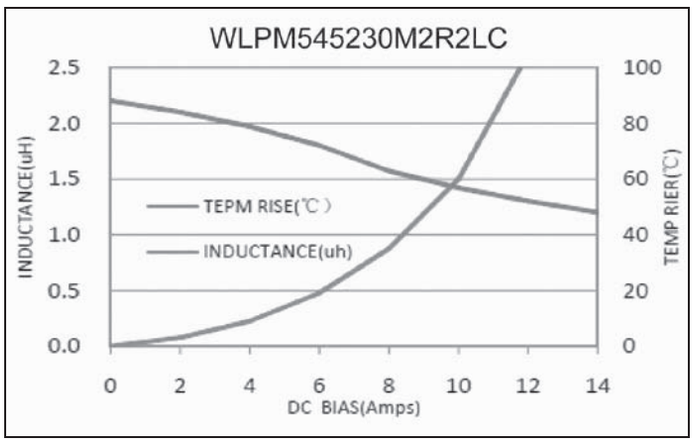
	DIM.	TOL.
M1	5.4	±0.3
M2	5.2	±0.3
M3	3.0	Max
M4	2.2	±0.3
M5	1.2	±0.2

Electrical Specification

Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (kHz),0.5V	RDC Maximum (mΩ)		Rated Current Typical (A)	I sat Typical (A)
				TYP.	MAX.		
WLPM545230MR20LC	0.20	±20%	100	3.5	3.9	18.0	14.5
WLPM545230MR47LC	0.47	±20%	100	7.4	8.5	13.5	12.0
WLPM545230MR68LC	0.68	±20%	100	11.0	12.0	8.5	14.0
WLPM545230M1R0LC	1.0	±20%	100	13.0	14.0	7.0	11.0
WLPM545230M1R2LC	1.2	±20%	100	15.0	16.0	6.5	11.0
WLPM545230M1R5LC	1.5	±20%	100	20.0	25.0	6.0	8.5
WLPM545230M2R2LC	2.2	±20%	100	25.0	29.0	5.5	7.5
WLPM545230M3R3LC	3.3	±20%	100	32.0	38.0	5.0	6.0
WLPM545230M4R7LC	4.7	±20%	100	50.0	60.0	3.5	5.0
WLPM545230M6R8LC	6.8	±20%	100	75.0	90.0	3.0	4.0
WLPM545230M100LC	10	±20%	100	110.0	125.0	2.5	3.5

TEST INSTRUMENT: CHROMA 16502, Zentech1320 + Zentech 3305

Characteristic Curve (2R2)



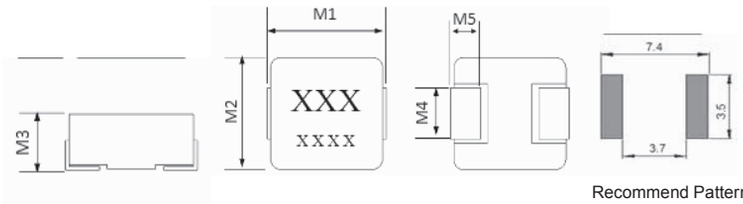
1. Test Freq: 100 KHz, 0.5V
2. All test data is referenced to 25℃ ambient.
3. Operating Temperature Range: -55℃ to +125℃.
4. Rated Current: DC current (A) that will cause an approximate△T of 40℃.
5. I sat: DC current (A) that will cause Lo to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified

SMD Molded Power Choke WLPM706630 Series

Mechanical Dimensions

(Unit: mm)

WLPM706630



Recommend Pattern

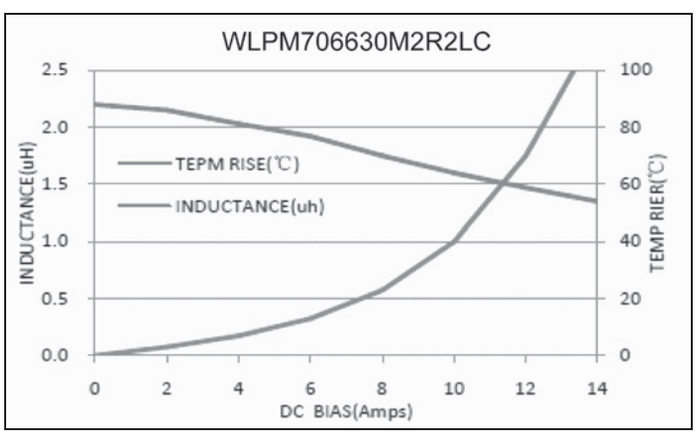
	DIM.	TOL.
M1	7.3	max
M2	6.6	±0.2
M3	3.0	max
M4	3.0	±0.3
M5	1.6	±0.3

Electrical Specification

Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (kHz),1V	RDC Maximum (mΩ)		Rated Current Typical (A)	I sat Typical (A)
				TYP.	MAX.		
WLPM706630MR15LC	0.15	±20%	100	1.9	2.5	26.0	52.0
WLPM706630MR22LC	0.22	±20%	100	2.5	2.8	23.0	40.0
WLPM706630MR24LC	0.24	±20%	100	2.5	2.8	23.0	40.0
WLPM706630MR33LC	0.33	±20%	100	3.5	3.9	20.0	30.0
WLPM706630MR47LC	0.47	±20%	100	4.0	4.2	17.5	26.0
WLPM706630MR56LC	0.56	±20%	100	4.7	5.0	16.5	25.5
WLPM706630MR68LC	0.68	±20%	100	5.0	5.5	15.5	25.0
WLPM706630MR82LC	0.82	±20%	100	6.7	8.0	13.0	20.0
WLPM706630M1R0LC	1.0	±20%	100	9.0	10.0	11.0	20.0
WLPM706630M1R5LC	1.5	±20%	100	14.0	15.0	9.0	16.0
WLPM706630M2R2LC	2.2	±20%	100	17.0	20.0	8.0	12.0
WLPM706630M3R3LC	3.3	±20%	100	28.0	30.0	6.0	10.0
WLPM706630M4R7LC	4.7	±20%	100	37.0	40.0	5.5	7.0
WLPM706630M5R6LC	5.6	±20%	100	40.0	44.0	5.5	6.0
WLPM706630M6R8LC	6.8	±20%	100	54.0	60.0	4.5	6.5
WLPM706630M8R2LC	8.2	±20%	100	54.0	60.0	4.5	6.0
WLPM706630M100LC	10	±20%	100	62.0	68.0	4.0	5.5
WLPM706630M150LC	15	±20%	100	110.0	125.0	3.5	3.0
WLPM706630M220LC	22	±20%	100	165.0	190.0	2.0	3.5

TEST INSTRUMENT: CHROMA 16502, Zentech1320 + Zentech 3305

Characteristic Curve (2R2)



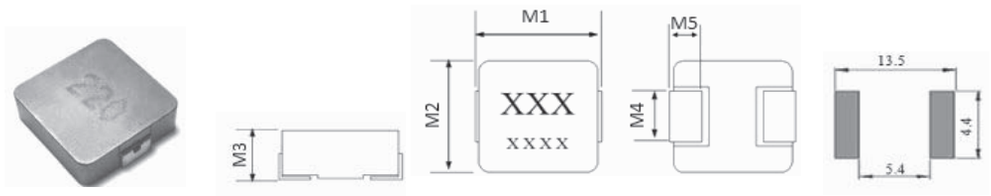
1. Test Freq: 100 KHz, 1V
2. All test data is referenced to 25℃ ambient.
3. Operating Temperature Range: -55℃ to +125℃.
4. Rated Current: DC current (A) that will cause an approximate△T of 40℃.
5. I sat: DC current (A) that will cause Lo to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified.

SMD Molded Power Choke WLPMA0A040 Series

Mechanical Dimensions

(unit: mm)

WLPMA0A040



Recommend Pattern

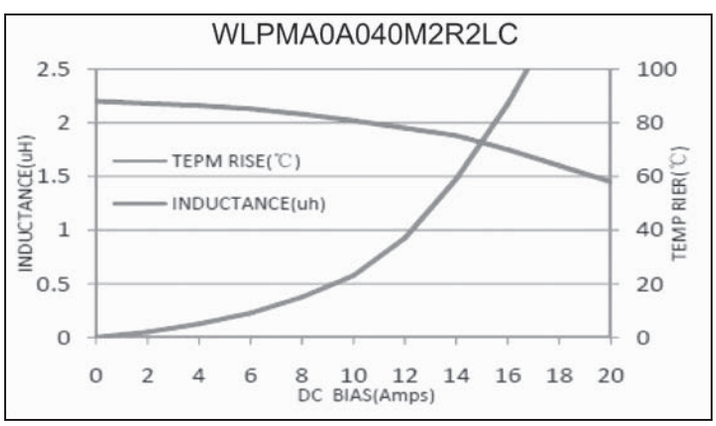
	DIM.	TOL.
M1	11.15	±0.35
M2	10.0	±0.3
M3	4.0	Max
M4	3.0	±0.5
M5	2.0	±0.5

Electrical Specification

Walsin Part Number	L(uH)	Tolerance	Measuring Frequency (kHz),1V	RDC Maximum (mΩ)		Rated Current Typical (A)	I sat Typical (A)
				TYP.	MAX.		
WLPMA0A040MR22LC	0.22	±20%	100	0.8	1	30	50
WLPMA0A040MR36LC	0.36	±20%	100	1.1	1.2	34	40
WLPMA0A040MR47LC	0.47	±20%	100	1.3	1.55	25	35
WLPMA0A040MR56LC	0.56	±20%	100	1.6	1.8	25	32
WLPMA0A040MR68LC	0.68	±20%	100	2.4	2.7	22	30
WLPMA0A040M1R0LC	1.0	±20%	100	3	3.3	18	28
WLPMA0A040M1R5LC	1.5	±20%	100	3.8	4.2	16	21
WLPMA0A040M2R2LC	2.2	±20%	100	6.7	7	12	18
WLPMA0A040M3R3LC	3.3	±20%	100	10.8	11.8	10	16
WLPMA0A040M4R7LC	4.7	±20%	100	17	20	8.5	15
WLPMA0A040M6R8LC	6.8	±20%	100	22.5	25	6.5	9
WLPMA0A040M8R2LC	8.2	±20%	100	26.0	29.0	7.0	9.0
WLPMA0A040M100LC	10	±20%	100	27.0	30.0	7.5	8.5
WLPMA0A040M150LC	15	±20%	100	40.0	45.0	6.25	7.0
WLPMA0A040M220LC	22	±20%	100	60.0	66.0	5.0	5.5
WLPMA0A040M330LC	33	±20%	100	85.0	92.0	4.4	5.0
WLPMA0A040M470LC	47	±20%	100	130.0	145.0	3.3	3.5
WLPMA0A040M560LC	56	±20%	100	150.0	170.0	3.8	2.8
WLPMA0A040M680LC	68	±20%	100	175.0	200.0	3.5	2.6

TEST INSTRUMENT: CHROMA 16502, Zentech1320 + Zentech 3305

Characteristic Curve (2R2)



1. Test Freq: 100 KHz, 1V
2. All test data is referenced to 25℃ ambient.
3. Operating Temperature Range: -55℃ to +125℃.
4. Rated Current: DC current (A) that will cause an approximate△T of 40℃.
5. I sat: DC current (A) that will cause Lo to drop approximately 30%.
6. The part temperature (ambient + temp rise) should not exceed 125℃ under worst case operating conditions. Circuit design, component placement, PWB trace size and thickness, airflow and other cooling provisions all affect the part temperature Part temperature should be verified

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NATIONAL QUALITY AWARD

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