

LMax SMD Shielded Power Inductor

LMXS Series – Shielded Style B

FEATURES

- Directly connected electrode on ferrite core
- Excellent property with high saturation for surface mounting

APPLICATIONS

- OA Equipment
- Notebook PCs
- LCD Monitor
- Portable Terminal Equipment
- DC/DC Converters, etc.
- Power Supply for VTR

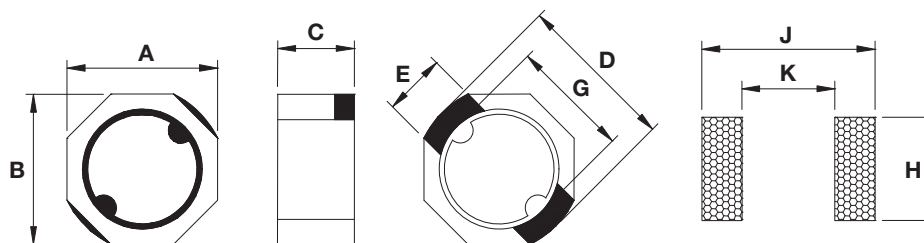
DIMENSIONS

CHARACTERISTICS

- Rated DC Current: The current when the inductance becomes 30% lower than its initial value.
- Operating temperature: -40 ~ 85°C

INDUCTANCE AND RATED CURRENT RANGES

- | | | |
|--------|---------------|---------------|
| • 04B4 | 0.47 ~ 2200μH | 1.84 ~ 0.035A |
| • 04C4 | 1.0 ~ 6800μH | 1.90 ~ 0.017A |
| • 04A4 | 1.0 ~ 100μH | 1.50 ~ 0.100A |
| • 0505 | 0.47 ~ 820μH | 2.33 ~ 0.030A |
| • 05C5 | 0.47 ~ 2500μH | 4.82 ~ 0.045A |
| • 0606 | 1.0 ~ 3300μH | 4.70 ~ 0.026A |
- Electrical specifications at 25°C



mm (inches)

Type	A	B	C max.	D	E	G	H	K	J
04B4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	2.00 (0.079)	3.9 ± 0.20 (0.154 ± 0.008)	1.60 (0.063)	3.20 (0.126)	1.90 (0.075)	3.00 (0.118)	4.55 (0.179)
04C4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	3.00 (0.118)	3.9 ± 0.20 (0.154 ± 0.008)	1.60 (0.063)	3.20 (0.126)	1.90 (0.075)	3.00 (0.118)	4.55 (0.179)
04A4	3.85 ± 0.30 (0.152 ± 0.012)	3.85 ± 0.30 (0.152 ± 0.012)	1.50 (0.059)	4.80 max. (0.189 max.)	1.60 (0.063)	3.00 (0.118)	2.00 (0.079)	2.60 (0.102)	5.20 (0.205)
0505	5.30 max. (0.207 max.)	5.30 max. (0.207 max.)	2.00 (0.079)	5.7 ± 0.40 (0.224 ± 0.016)	1.60 (0.063)	4.20 (0.165)	1.90 (0.075)	3.90 (0.154)	5.70 (0.224)
05C5	5.30 max. (0.207 max.)	5.30 max. (0.207 max.)	3.00 (0.118)	5.7 ± 0.40 (0.224 ± 0.016)	1.60 (0.063)	4.20 (0.165)	1.90 (0.075)	3.90 (0.154)	5.70 (0.224)
0606	5.90 ± 0.20 (0.232 ± 0.008)	5.90 ± 0.20 (0.232 ± 0.008)	3.00 (0.118)	6.4 ± 0.30 (0.252 ± 0.012)	2.40 (0.094)	4.70 (0.185)	2.70 (0.106)	4.40 (0.173)	6.50 (0.256)

HOW TO ORDER

LM	XS	0505	M	R04	B	T	A	S
Family	Series	Size	Tolerance	Inductance	Style	Termination	Special	Packaging
LM = Power Inductor	XS = Shielded	0505 = 5x5xh 05A5 = 5x5xA(h) (h = see catalog)	M = ±20% N = ±30% P = ±40%	R04 = 0.039μH R39 = 0.390μH 3R9 = 3.900μH 390 = 39.00μH 391 = 390.0μH 392 = 3900μH		T = Sn Plate	A = Standard	S = 13" Reel

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ELECTRICAL CHARACTERISTICS

04B4/04C4

Codes	L (µH)	Tolerance	Test	DCR (Ω) max.		I sat (A) max*	
			Condition	04B4	04C4	04B4	04C4
R47	0.47	N	100 KHz, 0.25V	0.017	–	1.84	–
1R0	1.0	N	100 KHz, 0.25V	0.030	0.009	1.80	1.90
1R2	1.2	N	100 KHz, 0.25V	0.043	0.010	1.70	1.75
1R5	1.5	N	100 KHz, 0.25V	0.052	0.013	1.60	1.45
1R8	1.8	N	100 KHz, 0.25V	0.056	–	1.55	–
2R0	2.0	N	100 KHz, 0.25V	0.057	0.016	1.51	1.25
2R2	2.2	N	100 KHz, 0.25V	0.058	0.025	1.50	1.15
2R4	2.4	N	100 KHz, 0.25V	0.059	–	1.41	–
2R5	2.5	N	100 KHz, 0.25V	0.059	0.018	1.40	1.05
2R7	2.7	N	100 KHz, 0.25V	0.060	0.020	1.35	1.00
3R3	3.3	N	100 KHz, 0.25V	0.064	0.030	1.30	0.96
3R5	3.5	N	100 KHz, 0.25V	0.127	0.025	1.30	0.95
3R9	3.9	N	100 KHz, 0.25V	–	0.033	–	0.87
4R7	4.7	N	100 KHz, 0.25V	0.146	0.039	1.10	0.78
5R6	5.6	N	100 KHz, 0.25V	0.176	0.044	0.95	0.74
6R2	6.2	N	100 KHz, 0.25V	0.220	–	0.91	–
6R8	6.8	N	100 KHz, 0.25V	0.238	0.051	0.90	0.68
8R2	8.2	N	100 KHz, 0.25V	0.272	0.065	0.80	0.57
100	10	M	1KHz, 0.25V	0.299	0.092	0.70	0.43
120	12	M	1KHz, 0.25V	–	0.100	–	0.38
150	15	M	1KHz, 0.25V	0.472	0.113	0.61	0.33
180	18	M	1KHz, 0.25V	0.552	0.125	0.58	0.30
220	22	M	1KHz, 0.25V	0.592	0.146	0.52	0.28
270	27	M	1KHz, 0.25V	0.630	0.176	0.44	0.26
330	33	M	1KHz, 0.25V	1.075	0.214	0.43	0.23
390	39	M	1KHz, 0.25V	1.269	0.225	0.37	0.21
470	47	M	1KHz, 0.25V	1.309	0.304	0.34	0.19
500	50	M	1KHz, 0.25V	–	–	–	–
560	56	M	1KHz, 0.25V	1.960	0.324	0.29	0.170
680	68	M	1KHz, 0.25V	2.613	0.472	0.25	0.156
820	82	M	1KHz, 0.25V	2.950	0.539	0.20	0.142
101	100	M	1KHz, 0.25V	3.255	0.608	0.19	0.128
121	120	M	1KHz, 0.25V	3.350	0.757	0.15	0.116
151	150	M	1KHz, 0.25V	3.550	0.882	0.12	0.106
181	180	M	1KHz, 0.25V	4.000	1.130	0.10	0.095
221	220	M	1KHz, 0.25V	4.900	1.269	0.09	0.087
271	270	M	1KHz, 0.25V	–	1.570	–	0.080
331	330	M	1KHz, 0.25V	7.280	1.930	0.08	0.078
391	390	M	1KHz, 0.25V	–	2.360	–	0.073
471	470	M	1KHz, 0.25V	–	2.770	–	0.068
561	560	M	1KHz, 0.25V	–	3.520	–	0.065
681	680	M	1KHz, 0.25V	13.37	4.250	0.07	0.056
821	820	M	1KHz, 0.25V	–	4.830	–	0.050
102	1000	M	1KHz, 0.25V	19.55	6.260	0.065	0.047
122	1200	M	1KHz, 0.25V	–	7.860	–	0.043
152	1500	M	1KHz, 0.25V	36.15	9.980	0.038	0.039

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

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04A4

Codes	L (μH)	Tolerance	Test Condition	DCR (Ω) max.	I sat (A) max*
1R0	1.0	N	100KHz, 0.1V	0.058	1.50
1R2	1.2	N	100KHz, 0.1V	0.070	1.40
2R2	2.2	N	100KHz, 0.1V	0.082	1.00
3R3	3.3	N	100KHz, 0.1V	0.105	0.92
3R9	3.9	N	100KHz, 0.1V	0.120	0.80
4R7	4.7	N	100KHz, 0.1V	0.150	0.76
5R6	5.6	N	100KHz, 0.1V	0.180	0.69
6R8	6.8	N	100KHz, 0.1V	0.220	0.62
8R2	8.2	N	100KHz, 0.1V	0.240	0.56
100	10	N	100KHz, 0.1V	0.255	0.50
150	15	N	100KHz, 0.1V	0.390	0.40
220	22	M	100KHz, 0.1V	0.610	0.32
330	33	M	100KHz, 0.1V	0.920	0.28
470	47	M	100KHz, 0.1V	1.130	0.20
680	68	M	100KHz, 0.1V	1.520	0.15
101	100	M	100KHz, 0.1V	2.120	0.10

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.

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0505/05C5/0606

Codes	L (µH)	Tolerance	Test Condition	DCR (Ω) max.			I sat (A) max*		
				0505	05C5	0606	0505	05C5	0606
R47	0.47	N	100KHz, 0.25V	0.015	0.010	–	2.33	4.82	–
1R0	1.0	N	100KHz, 0.25V	0.024	0.015	0.014	2.27	4.00	4.70
1R1	1.1	N	100KHz, 0.25V	–	0.020	–	–	3.87	–
1R2	1.2	N	100KHz, 0.25V	0.044	0.022	0.016	2.15	3.80	3.90
1R5	1.5	N	100KHz, 0.25V	–	–	0.018	–	–	3.52
1R8	1.8	N	100KHz, 0.25V	–	–	0.019	–	–	3.25
2R0	2.0	N	100KHz, 0.25V	0.046	0.027	0.022	1.90	2.92	2.95
2R2	2.2	N	100KHz, 0.25V	0.059	0.029	0.022	1.63	2.41	2.95
2R4	2.4	N	100KHz, 0.25V	0.062	0.034	0.024	1.50	2.36	2.75
2R7	2.7	N	100KHz, 0.25V	–	–	0.027	–	–	2.55
3R3	3.3	N	100KHz, 0.25V	0.073	0.040	0.030	1.34	1.95	2.45
3R9	3.9	N	100KHz, 0.25V	0.081	–	0.034	1.20	–	2.35
4R1	4.1	N	100KHz, 0.25V	0.087	0.045	–	1.14	1.87	–
4R7	4.7	N	100KHz, 0.25V	–	0.052	0.042	–	1.60	2.25
5R6	5.6	N	100KHz, 0.25V	–	–	0.048	–	–	2.05
6R8	6.8	N	100KHz, 0.25V	0.105	0.068	0.054	0.95	1.51	1.85
8R2	8.2	N	100KHz, 0.25V	0.139	0.084	0.058	0.90	1.38	1.65
100	10	M	1KHz, 0.25V	0.150	0.090	0.065	0.76	1.33	1.45
120	12	M	1KHz, 0.25V	–	0.120	0.082	–	1.06	1.35
150	15	M	1KHz, 0.25V	0.210	0.142	0.096	0.63	1.05	1.25
180	18	M	1KHz, 0.25V	–	0.192	0.110	–	0.90	1.15
220	22	M	1KHz, 0.25V	0.275	0.208	0.140	0.56	0.86	0.98
270	27	M	1KHz, 0.25V	0.452	0.222	0.170	0.48	0.75	0.90
330	33	M	1KHz, 0.25V	0.455	0.257	0.210	0.44	0.72	0.80
390	39	M	1KHz, 0.25V	–	0.320	0.240	–	0.64	0.72
470	47	M	1KHz, 0.25V	0.730	0.352	0.280	0.35	0.62	0.70
560	56	M	1KHz, 0.25V	–	0.459	0.340	–	0.53	0.66
680	68	M	1KHz, 0.25V	0.935	0.525	0.410	0.30	0.51	0.58
820	82	M	1KHz, 0.25V	1.300	0.770	0.490	0.27	0.48	0.52
101	100	M	1KHz, 0.25V	1.500	0.801	0.550	0.23	0.43	0.46
121	120	M	1KHz, 0.25V	1.910	0.850	0.700	0.22	0.34	0.42
151	150	M	1KHz, 0.25V	2.680	1.100	0.780	0.21	0.26	0.36
181	180	M	1KHz, 0.25V	3.040	1.190	0.960	0.20	0.24	0.34
221	220	M	1KHz, 0.25V	3.520	1.530	1.080	0.195	0.20	0.32
271	270	M	1KHz, 0.25V	4.380	–	1.360	0.193	–	0.28
331	330	M	1KHz, 0.25V	5.560	2.030	1.820	0.190	0.19	0.24
391	390	M	1KHz, 0.25V	–	3.000	2.050	–	0.16	0.22
471	470	M	1KHz, 0.25V	7.820	3.500	2.580	0.180	0.15	0.20
561	560	M	1KHz, 0.25V	–	4.080	3.160	–	0.14	0.18
681	680	M	1KHz, 0.25V	–	–	4.040	–	–	0.16
821	820	M	1KHz, 0.25V	15.00	–	4.900	0.120	–	0.14
102	1000	M	1KHz, 0.25V	–	–	6.000	–	–	0.13
122	1200	M	1KHz, 0.25V	–	8.500	7.600	–	0.070	0.12
152	1522	M	1KHz, 0.25V	–	10.00	9.440	–	0.065	0.10
182	1800	M	1KHz, 0.25V	–	13.15	11.70	–	0.062	0.098
222	2200	M	1KHz, 0.25V	–	19.00	13.40	–	0.050	0.095
252	2500	M	1KHz, 0.25V	–	20.00	–	–	0.045	–
272	2700	M	1KHz, 0.25V	–	–	17.30	–	–	0.086
332	3300	M	1KHz, 0.25V	–	–	22.10	–	–	0.078

*Saturation Current: The current when the inductance becomes 30% lower than its initial value.