Shielded Power Inductors–MSS1260

- 12.3 × 12.3 mm footprint; 6 mm high shielded inductors
- Low DCR and excellent current handling

Designer's Kit C360 contains 3 each of all values.
Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.
Weight: 2.8 – 3.3 g
Ambient temperature –40°C to +85°C with (40°C rise) Irms current.
Maximum part temperature +125°C (ambient + temp rise). Derating.
Storage temperature Component: –40°C to +125°C. Tape and reel packaging: –40°C to +80°C
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)
Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332
Packaging 500/13″ reel; Plastic tape: 24 mm wide, 0.35 mm thick, 16 mm pocket spacing, 6.3 mm pocket depth
PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787_PCB_Washing.pdf.

Part number[1]	Inductance[2] (µH)	DCR[3] (mOhms) typ	DCR[3] (mOhms) max	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 40°C rise
MSS1260-102NL_	1.0±30%	5.8	6.5	100	19.1	21.4	22.7	6.00	8.00
MSS1260-152NL_	1.5±30%	8.8	9.8	80.0	15.0	16.6	17.6	6.00	7.50
MSS1260-222NL_	2.2±30%	11.5	12.8	55.0	11.7	13.0	13.9	5.50	7.00
MSS1260-332NL_	3.3±30%	12.6	14.0	42.0	10.4	11.7	12.5	5.00	7.00
MSS1260-472ML_	4.7±20%	13.9	15.5	33.0	9.22	10.1	10.8	4.50	7.00
MSS1260-562ML_	5.6±20%	14.9	16.6	30.0	7.86	9.02	9.74	4.00	6.40
MSS1260-682ML_	6.8±20%	16.6	18.5	27.0	7.40	8.26	8.80	3.80	5.90
MSS1260-822ML_	8.2±20%	17.0	20.0	26.0	7.10	7.96	8.50	3.40	4.80
MSS1260-103ML_	10±20%	21.5	23.9	22.0	6.18	6.92	7.40	3.00	4.00
MSS1260-123ML_	12±20%	24.5	27.3	20.0	5.18	5.94	6.42	2.80	3.70
MSS1260-153ML_	15±20%	27.0	32.0	18.0	4.80	5.40	5.78	2.60	3.50
MSS1260-183ML_	18±20%	30.0	33.0	16.0	4.58	5.22	5.62	2.50	3.30
MSS1260-223ML_	22±20%	36.6	40.7	15.0	4.06	4.64	4.96	2.30	3.10
MSS1260-273ML_	27±20%	48.0	52.0	13.0	3.52	3.96	4.28	2.10	2.90
MSS1260-333ML_	33±20%	54.0	57.0	12.4	3.22	3.74	4.02	2.00	2.70
MSS1260-393ML_	39±20%	58.0	64.5	12.0	3.08	3.56	3.80	1.90	2.60
MSS1260-473ML_	47±20%	75.0	82.0	11.6	2.66	3.04	3.30	1.85	2.50
MSS1260-563ML_	56±20%	85.0	89.0	10.5	2.54	2.96	3.14	1.75	2.40
MSS1260-683ML_	68±20%	94.5	105	10.0	2.40	2.70	2.94	1.70	2.30
MSS1260-823ML_	82±20%	120	129	8.6	2.16	2.46	2.64	1.60	2.20
MSS1260-104ML_	100±20%	139	146	7.8	1.88	2.16	2.32	1.50	2.10
MSS1260-124KL_	120±10%	193	195	6.8	1.70	1.92	2.10	1.38	1.85
MSS1260-154KL_	150±10%	209	216	6.4	1.58	1.80	1.98	1.20	1.66
MSS1260-184KL_	180±10%	234	246	6.1	1.40	1.60	1.72	1.14	1.58
MSS1260-224KL_	220±10%	306	335	5.5	1.28	1.44	1.56	1.00	1.42
MSS1260-274KL_	270±10%	349	355	4.3	1.10	1.26	1.38	0.90	1.45
MSS1260-334KL_	330±10%	482	494	4.0	1.00	1.14	1.24	0.84	1.16
MSS1260-394KL_	390±10%	515	533	3.6	0.93	1.06	1.15	0.78	1.08
MSS1260-474KL_	470±10%	705	733	3.0	0.87	0.99	1.06	0.70	0.96
MSS1260-564KL_	560±10%	776	800	2.8	0.81	0.92	1.00	0.64	0.88
MSS1260-684KL_	680±10%	887	910	2.6	0.74	0.85	0.92	0.58	0.80
MSS1260-824KL_	820±10%	1130	1152	2.5	0.66	0.76	0.81	0.53	0.73
MSS1260-105KL_	1000±10%	1295	1335	2.4	0.60	0.69	0.74	0.48	0.68

1. Please specify **termination** and **packaging** codes:

MSS1260-184KLD

Termination: L = RoHS compliant matte tin over nickel over phos bronze. Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

Packaging: D = 13″ machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter D instead.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
3. DCR measured on a micro-ohmmeter and a Coilcraft CCF858 test fixture.
4. SRF measured using Agilent/HP 4191A or equivalent.
5. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.
6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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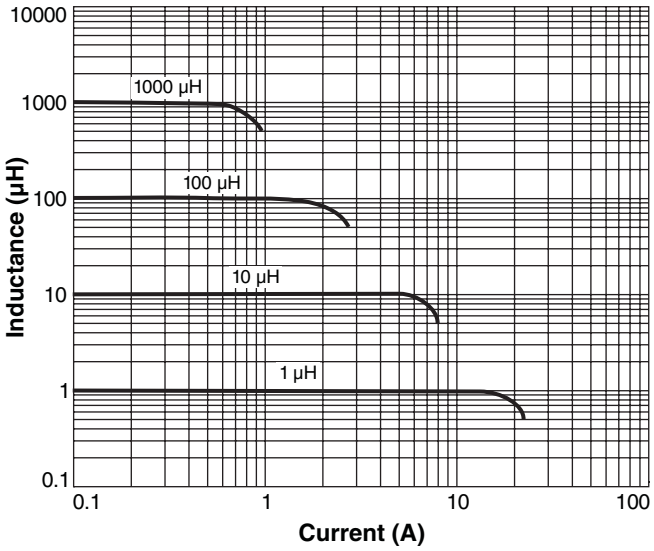
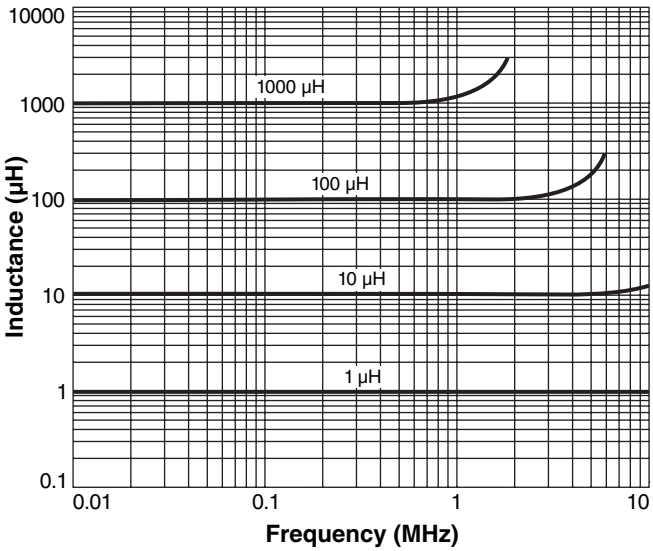
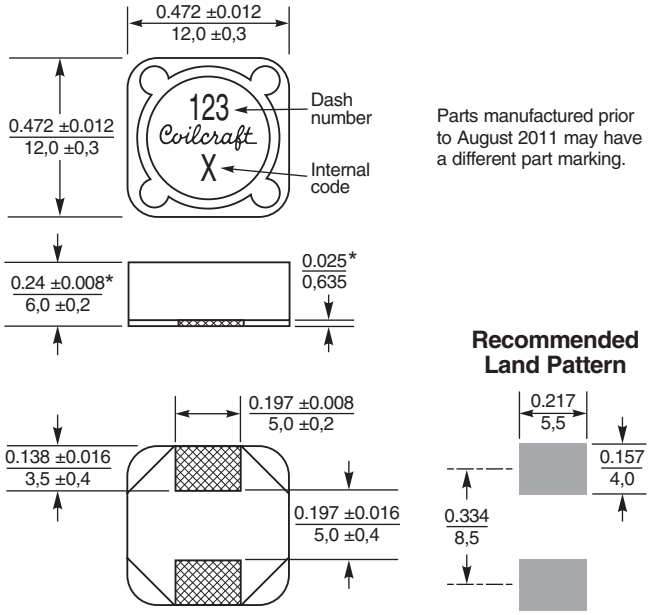
Shielded Power Inductors – MSS1260

Typical L vs Current



Typical L vs Frequency





Parts manufactured prior to August 2011 may have a different part marking.

Recommended Land Pattern

* For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.012 inch (0,3 mm).

Dimensions are in inches / mm

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Document 281-2 Revised 09/02/15

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