



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 Irms current, +85°C to +125°C with derated current

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 Only pure water or alcohol recommended

Part number ¹	Inductance ² (µH)	DCR ³ (mOhms)		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		typ	max		10% drop	20% drop	30% drop	20°C rise	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.

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
 - DCR measured on a micro-ohmmeter and a Coilcraft CCF858 test fixture.
 - SRF measured using Agilent/HP 4191A or equivalent.
 - DC current at which the inductance drops the specified amount from its value without current.
 - Current that causes the specified temperature rise from 25°C ambient.
 - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models ON OUR WEB SITE



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

Singapore + 65-6484 8412 sales@coilcraft.com.sg

Document 281-1 Revised 10/31/11

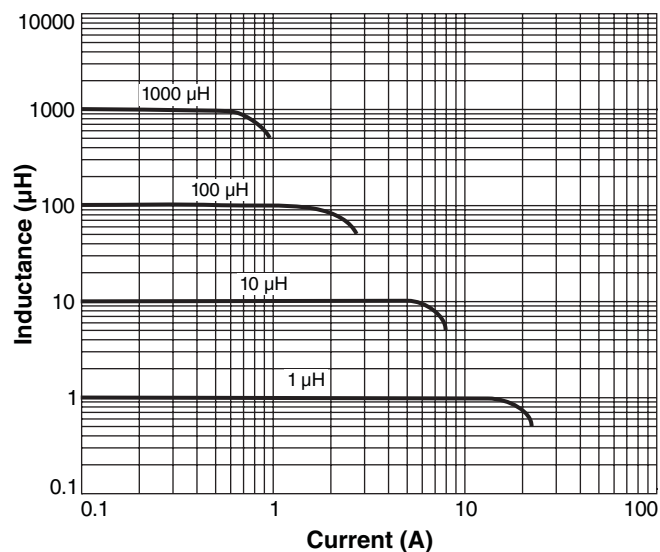
© Coilcraft Inc. 2011

This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

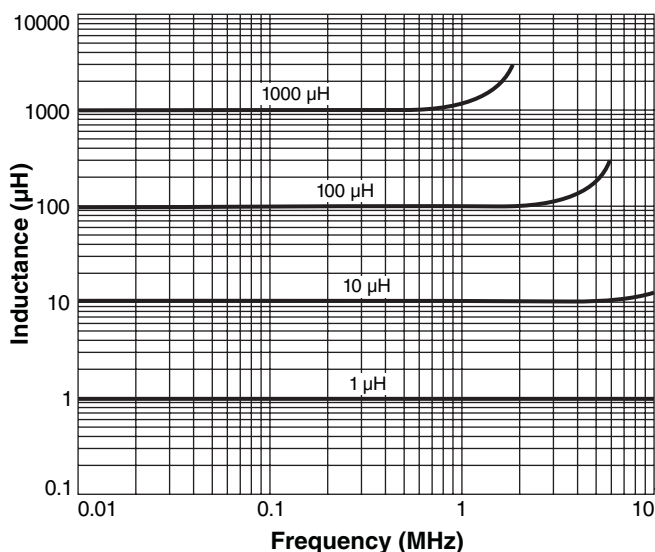


Shielded Power Inductors – MSS1260

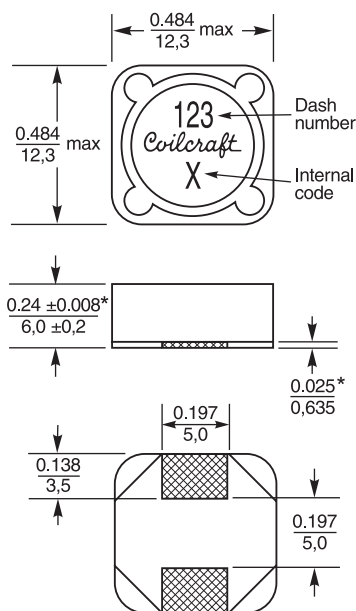
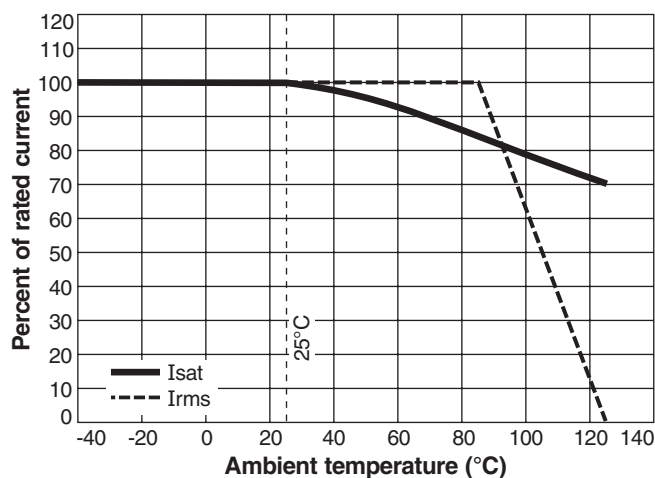
Typical L vs Current



Typical L vs Frequency

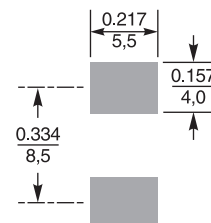


Typical Current Derating



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 $\frac{\text{inches}}{\text{mm}}$