



SMT 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

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 I_{rms} current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°C.
Packaging: –55°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)

Mean Time Between Failures (MTBF) 26,315,789 hours

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 (μ H)	DCR max (Ohms)	SRF typ ³ (MHz)	Isat (A) ⁴			Irms (A) ⁵	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
MSS1260-102NL_	1.0 ±30%	0.010	100	19.1	21.4	22.7	6.00	8.00
MSS1260-152NL_	1.5 ±30%	0.013	80.0	15.0	16.6	17.6	6.00	7.50
MSS1260-222NL_	2.2 ±30%	0.014	55.0	11.7	13.0	13.9	5.50	7.00
MSS1260-332NL_	3.3 ±30%	0.016	42.0	10.4	11.7	12.5	5.00	7.00
MSS1260-472ML_	4.7 ±20%	0.020	33.0	9.22	10.1	10.8	4.50	7.00
MSS1260-562ML_	5.6 ±20%	0.022	30.0	7.86	9.02	9.74	4.00	6.40
MSS1260-682ML_	6.8 ±20%	0.023	27.0	7.40	8.26	8.80	3.80	5.90
MSS1260-822ML_	8.2 ±20%	0.025	26.0	7.10	7.96	8.50	3.40	4.80
MSS1260-103ML_	10 ±20%	0.028	22.0	6.18	6.92	7.40	3.00	4.00
MSS1260-123ML_	12 ±20%	0.032	20.0	5.18	5.94	6.42	2.80	3.70
MSS1260-153ML_	15 ±20%	0.040	18.0	4.80	5.40	5.78	2.60	3.50
MSS1260-183ML_	18 ±20%	0.045	16.0	4.58	5.22	5.62	2.50	3.30
MSS1260-223ML_	22 ±20%	0.052	15.0	4.06	4.64	4.96	2.30	3.10
MSS1260-273ML_	27 ±20%	0.065	13.0	3.52	3.96	4.28	2.10	2.90
MSS1260-333ML_	33 ±20%	0.075	12.4	3.22	3.74	4.02	2.00	2.70
MSS1260-393ML_	39 ±20%	0.080	12.0	3.08	3.56	3.80	1.90	2.60
MSS1260-473ML_	47 ±20%	0.100	11.6	2.66	3.04	3.30	1.85	2.50
MSS1260-563ML_	56 ±20%	0.120	10.5	2.54	2.96	3.14	1.75	2.40
MSS1260-683ML_	68 ±20%	0.130	10.0	2.40	2.70	2.94	1.70	2.30
MSS1260-823ML_	82 ±20%	0.160	8.6	2.16	2.46	2.64	1.60	2.20
MSS1260-104ML_	100 ±20%	0.190	7.8	1.88	2.16	2.32	1.50	2.10
MSS1260-124KL_	120 ±10%	0.250	6.8	1.70	1.92	2.10	1.38	1.85
MSS1260-154KL_	150 ±10%	0.280	6.4	1.58	1.80	1.98	1.20	1.66
MSS1260-184KL_	180 ±10%	0.320	6.1	1.40	1.60	1.72	1.14	1.58
MSS1260-224KL_	220 ±10%	0.420	5.5	1.28	1.44	1.56	1.00	1.42
MSS1260-274KL_	270 ±10%	0.480	4.3	1.10	1.26	1.38	0.90	1.45
MSS1260-334KL_	330 ±10%	0.630	4.0	1.00	1.14	1.24	0.84	1.16
MSS1260-394KL_	390 ±10%	0.700	3.6	0.93	1.06	1.15	0.78	1.08
MSS1260-474KL_	470 ±10%	0.900	3.0	0.87	0.99	1.06	0.70	0.96
MSS1260-564KL_	560 ±10%	1.000	2.8	0.81	0.92	1.00	0.64	0.88
MSS1260-684KL_	680 ±10%	1.200	2.6	0.74	0.85	0.92	0.58	0.80
MSS1260-824KL_	820 ±10%	1.600	2.5	0.66	0.76	0.81	0.53	0.73
MSS1260-105KL_	1000 ±10%	1.850	2.4	0.60	0.69	0.74	0.48	0.68

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

$\begin{array}{c} \text{MSS1260-184K} \\ \text{L} \quad \text{D} \end{array}$

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. SRF measured using Agilent/HP 4191A or equivalent.
 4. DC current at which the inductance drops the specified amount from its value without current.
 5. Current that causes the specified temperature rise from 25°C ambient.
 6. Electrical specifications at 25°C.
- See Qualification Standards section for environmental and test data.
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

SPICE models ON OUR WEB SITE OR CD

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Specifications subject to change without notice.
Please check our website for latest information.

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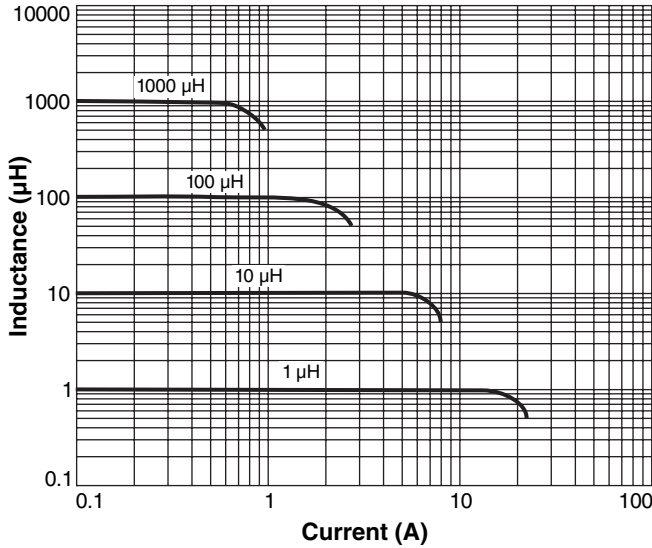
1102 Silver Lake Road Cary, Illinois 60013 Phone 847/639-6400 Fax 847/639-1469

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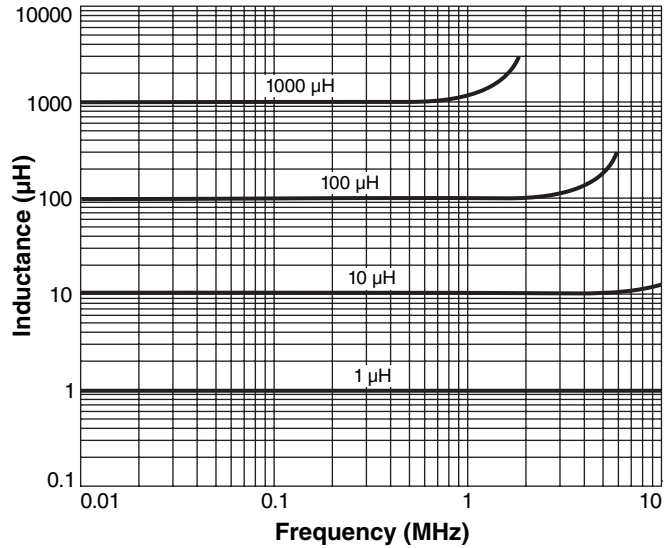


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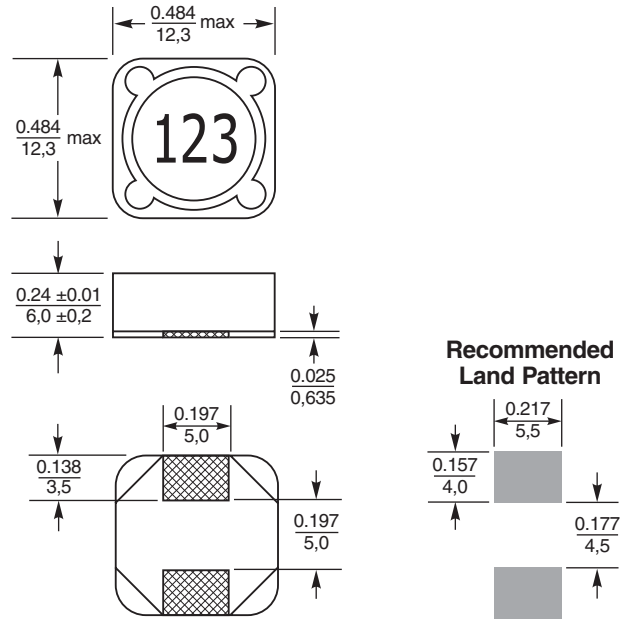
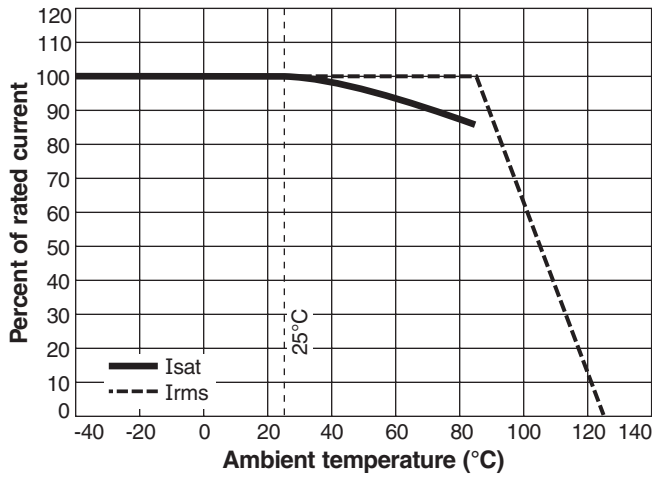
Typical L vs Current



Typical L vs Frequency



Typical Current Derating



Dimensions are in $\frac{\text{inches}}{\text{mm}}$



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