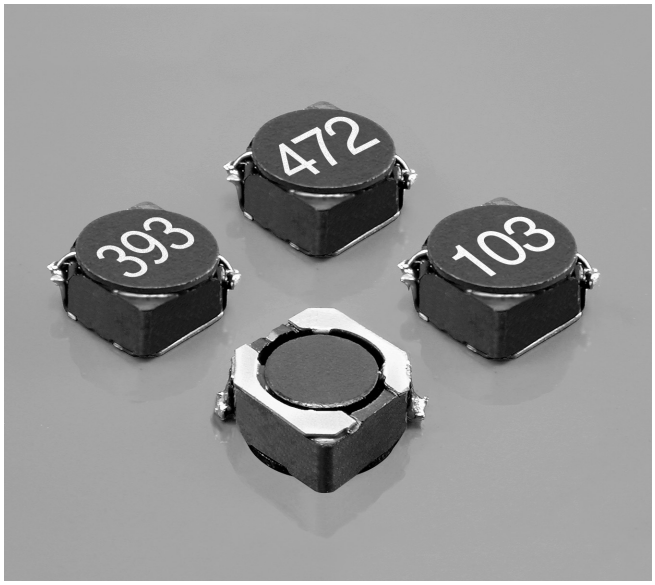
Shielded Power Inductors – MSS6132



- 6.1 × 6.1 mm footprint; 3.2 mm high shielded inductors
- Low DCR and excellent current handling

Designer's Kit C364 contains 3 of each value
Core material Ferrite
Core and winding loss See www.coilcraft.com/coreloss
Terminations RoHS compliant matte tin over nickel over phos bronze (current production) or gold over nickel over phos bronze (prior production). Other terminations available at additional cost.
Weight 0.33 – 0.38 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 500/7″ reel, 1500/13″ reel; Plastic tape: 16 mm wide, 0.3 mm thick, 12 mm pocket spacing, 3.1 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] ±20% (µH)	DCR max (Ohms)	SRF typ[3] (MHz)	Isat (A)[4] 10% drop	20% drop	30% drop	Irms (A)[5] 20°C rise	40°C rise
MSS6132-472ML_	4.7	0.043	65.0	2.18	2.60	2.84	2.30	3.10
MSS6132-562ML_	5.6	0.048	60.0	2.10	2.50	2.74	2.20	2.95
MSS6132-682ML_	6.8	0.052	47.0	1.80	2.12	2.30	2.10	2.80
MSS6132-822ML_	8.2	0.055	45.0	1.78	2.06	2.22	2.00	2.65
MSS6132-103ML_	10	0.070	39.0	1.36	1.64	1.84	1.90	2.50
MSS6132-123ML_	12	0.079	33.0	1.30	1.54	1.70	1.75	2.35
MSS6132-153ML_	15	0.106	27.0	1.16	1.42	1.56	1.65	2.20
MSS6132-183ML_	18	0.118	24.0	1.04	1.22	1.36	1.55	2.05
MSS6132-223ML_	22	0.158	21.0	0.97	1.12	1.22	1.45	1.90
MSS6132-273ML_	27	0.180	19.0	0.91	1.08	1.18	1.30	1.75
MSS6132-333ML_	33	0.250	18.0	0.81	0.96	1.10	1.20	1.60
MSS6132-393ML_	39	0.275	17.0	0.79	0.92	0.99	1.10	1.45
MSS6132-473ML_	47	0.300	16.0	0.72	0.86	0.93	0.95	1.30
MSS6132-563ML_	56	0.380	14.0	0.61	0.72	0.79	0.85	1.15
MSS6132-683ML_	68	0.410	12.0	0.55	0.63	0.69	0.73	1.00
MSS6132-823ML_	82	0.510	10.0	0.53	0.62	0.67	0.60	0.85
MSS6132-104ML_	100	0.660	9.0	0.45	0.54	0.59	0.50	0.69

SPICE models
ON OUR WEB SITE

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

MSS6132-823MLC

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

Packaging: **C** = **7″ machine-ready reel** EIA-481 embossed plastic tape (500 per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer ($25 charge).
D = **13″ machine-ready reel** EIA-481 embossed plastic tape. Factory order only, not stocked (1500 per reel per full reel).
B = **Less than full reel** Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

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. 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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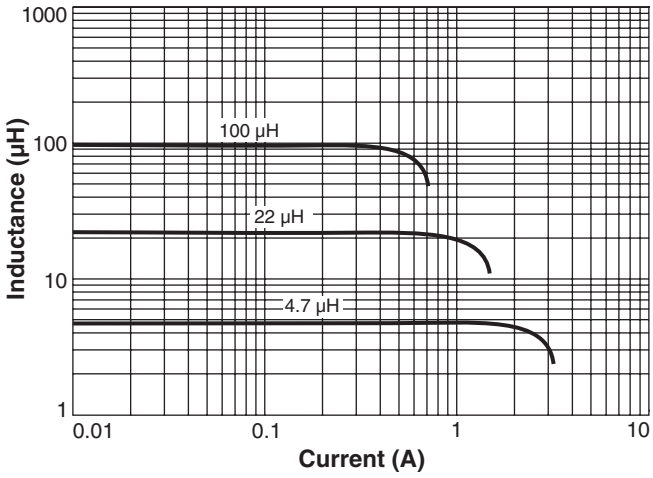
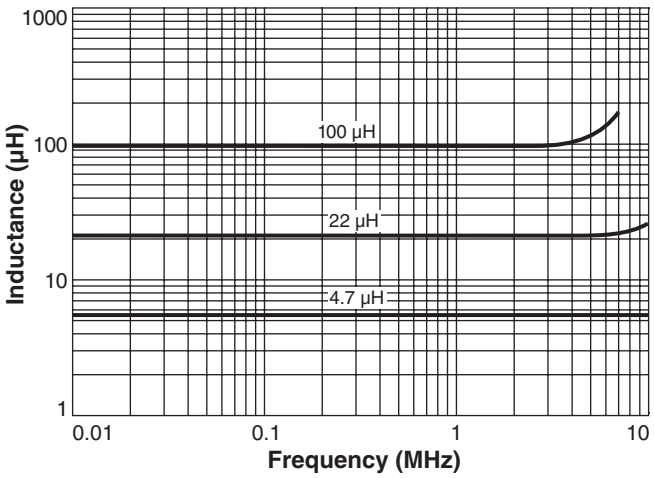
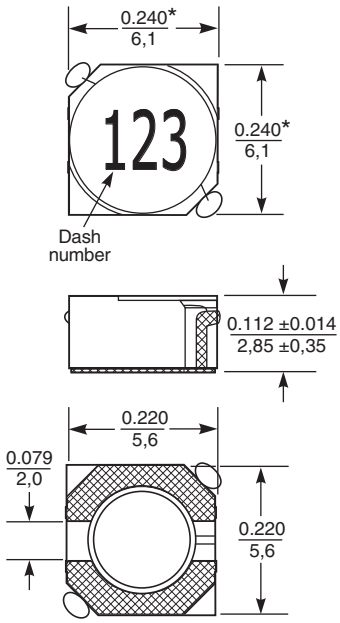
SMT Power Inductors – MSS6132

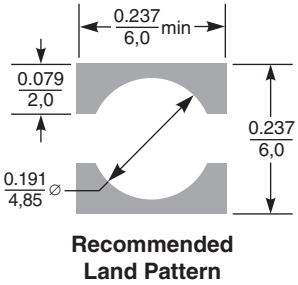
Typical L vs Current



Typical L vs Frequency







Recommended Land Pattern

*Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.016 in / 0,4 mm.

Dimensions are in inches / mm