

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 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 500/7" 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 with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number ¹	Inductance ² ±20% (µH)	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
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

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).

B = Less than full reel In tape, but not machine-ready. To have a leader and trailer added (\$25 charge), use code letter C instead.

D = 13" machine-ready reel EIA-481 embossed plastic tape. Factory order only, not stocked (1500 per full reel).

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.
- 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 641-1 Revised 03/06/12

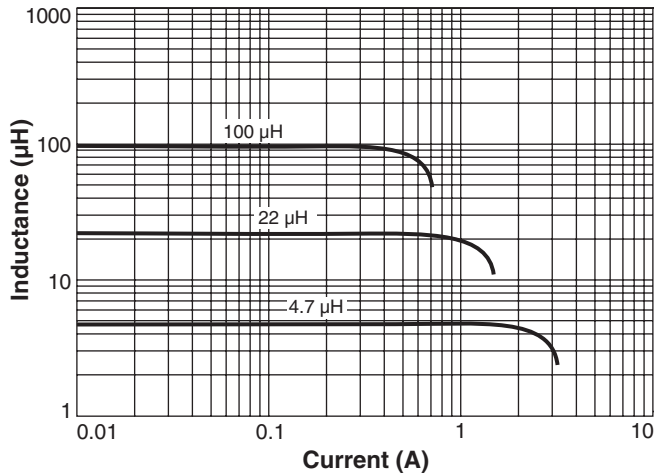
© Coilcraft Inc. 2013

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

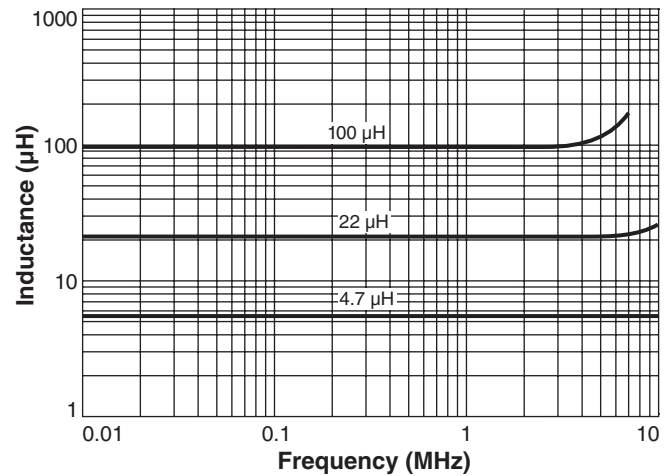


SMT Power Inductors – MSS6132

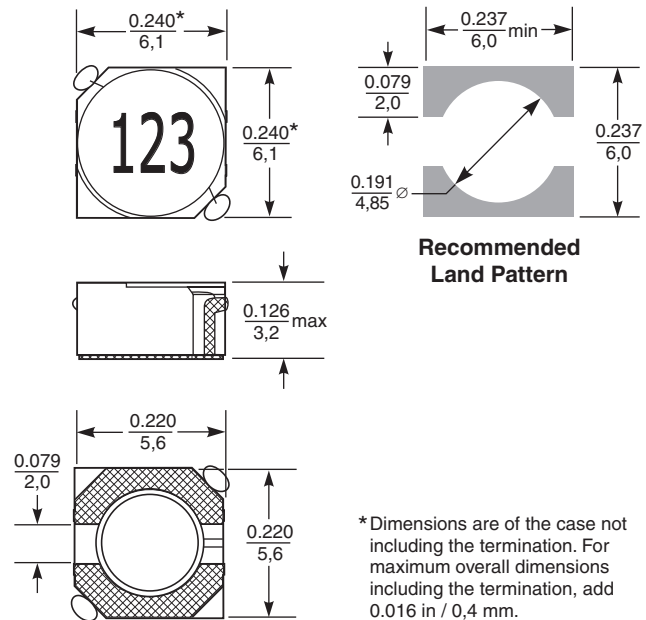
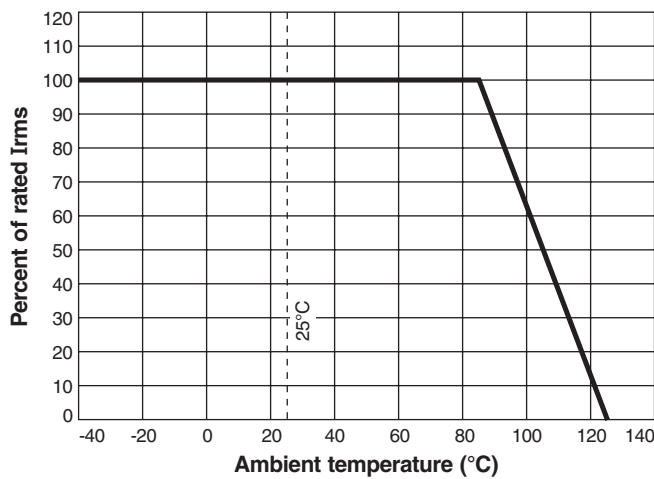
Typical L vs Current



Typical L vs Frequency



Irms Derating



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