



SMT 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 gold over nickel over phos bronze. 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. 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 500/7" reel, 1500/13" reel; Plastic tape: 16 mm wide, 0.3 mm thick, 12 mm pocket spacing, 3.1 mm pocket depth

PCB washing Only pure water or alcohol recommended

| 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 | 0.056 | 65.0 | 2.18 | 2.60 | 2.84 | 2.30 | 3.10 |
| MSS6132-562ML_ | 5.6 | 0.060 | 60.0 | 2.10 | 2.50 | 2.74 | 2.20 | 2.95 |
| MSS6132-682ML_ | 6.8 | 0.065 | 47.0 | 1.80 | 2.12 | 2.30 | 2.10 | 2.80 |
| MSS6132-822ML_ | 8.2 | 0.070 | 45.0 | 1.78 | 2.06 | 2.22 | 2.00 | 2.65 |
| MSS6132-103ML_ | 10 | 0.085 | 39.0 | 1.36 | 1.64 | 1.84 | 1.90 | 2.50 |
| MSS6132-123ML_ | 12 | 0.110 | 33.0 | 1.30 | 1.54 | 1.70 | 1.75 | 2.35 |
| MSS6132-153ML_ | 15 | 0.135 | 27.0 | 1.16 | 1.42 | 1.56 | 1.65 | 2.20 |
| MSS6132-183ML_ | 18 | 0.160 | 24.0 | 1.04 | 1.22 | 1.36 | 1.55 | 2.05 |
| MSS6132-223ML_ | 22 | 0.190 | 21.0 | 0.97 | 1.12 | 1.22 | 1.45 | 1.90 |
| MSS6132-273ML_ | 27 | 0.235 | 19.0 | 0.91 | 1.08 | 1.18 | 1.30 | 1.75 |
| MSS6132-333ML_ | 33 | 0.310 | 18.0 | 0.81 | 0.96 | 1.10 | 1.20 | 1.60 |
| MSS6132-393ML_ | 39 | 0.345 | 17.0 | 0.79 | 0.92 | 0.99 | 1.10 | 1.45 |
| MSS6132-473ML_ | 47 | 0.380 | 16.0 | 0.72 | 0.86 | 0.93 | 0.95 | 1.30 |
| MSS6132-563ML_ | 56 | 0.430 | 14.0 | 0.61 | 0.72 | 0.79 | 0.85 | 1.15 |
| MSS6132-683ML_ | 68 | 0.580 | 12.0 | 0.55 | 0.63 | 0.69 | 0.73 | 1.00 |
| MSS6132-823ML_ | 82 | 0.640 | 10.0 | 0.53 | 0.62 | 0.67 | 0.60 | 0.85 |
| MSS6132-104ML_ | 100 | 0.820 | 9.0 | 0.45 | 0.54 | 0.59 | 0.50 | 0.69 |

- Please specify **termination** and **packaging** codes:

MSS6132-823ML C

Termination: L = RoHS compliant gold 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: 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 reel per full reel).

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc using an Agilent/HP 4263B LCR meter or equivalent.
 - SRF measured using Agilent/HP 4191A or equivalent.
 - DC current at which the inductance drops 10% (typ) from its value without current.
 - Current that causes the specified temperature rise from 25°C ambient.
 - 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

Coilcraft®

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

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OMECON

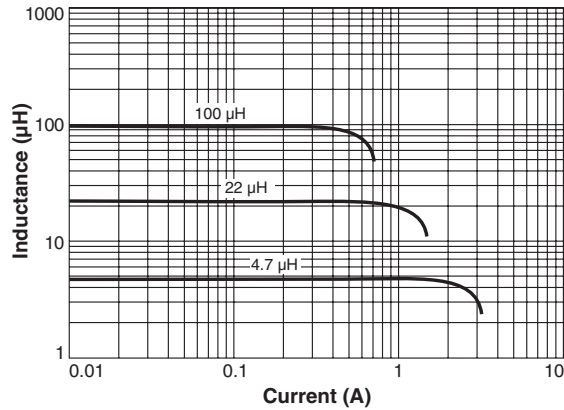
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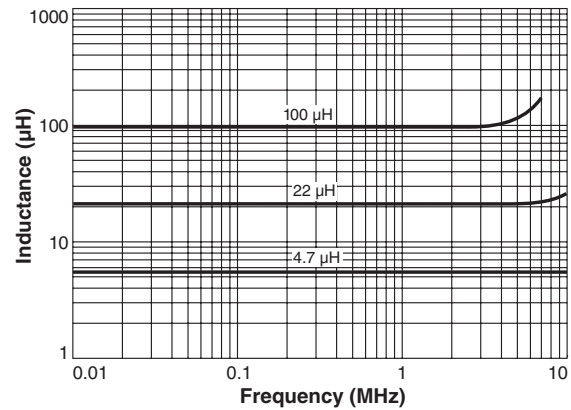


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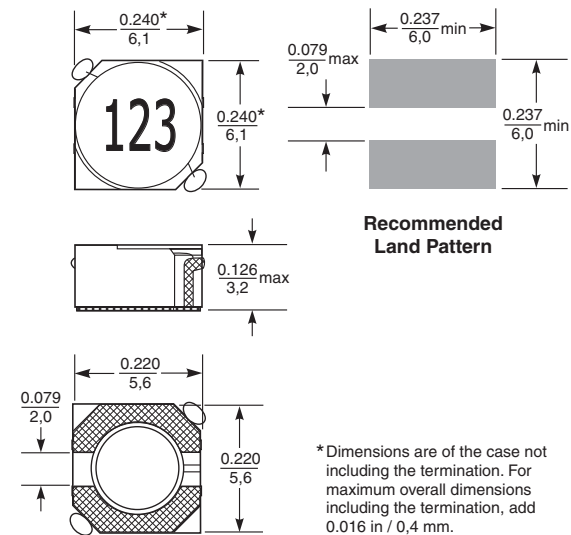
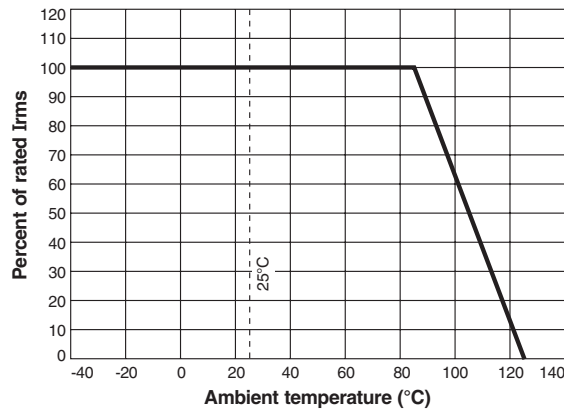
Typical L vs Current



Typical L vs Frequency



Irms Derating



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



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