

NEW!

High Temp Power Inductors MSS7348T



- Very low DCR – as low as 0.015 Ohms
- Current handling as high as 5.7 A
- AEC-Q200 qualified
- Designed for high ambient temperatures – up to 125°C
- Wide range of inductance values available

Core material Ferrite

Terminations RoHS compliant matte tin over nickel over phos bronze. Other terminations available at additional cost.

Weight 0.58 – 0.72 g

Operating voltage 400 V max

Ambient temperature -40°C to +125°C with (40°C rise) Irms current.

Maximum part temperature +165°C (ambient + temp rise).

Storage temperature Component: -40°C to +165°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)

Packaging 250/7" reel; 1000/13" reel; Plastic tape: 16 mm wide, 0.4 mm thick, 12 mm pocket spacing, 4.9 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 (Ohms) | | SRF typ ³ (MHz) | Isat (A) ⁴ | | | Irms (A) ⁵ | |
|--------------------------|--------------------------------------|------------|-------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|
| | | typ | max | | 10% drop | 20% drop | 30% drop | 20°C rise | 40°C rise |
| MSS7348T-332ME_ | 3.3 | 0.015 | 0.018 | 92 | 4.3 | 5.2 | 5.7 | 3.2 | 4.4 |
| MSS7348T-472ME_ | 4.7 | 0.024 | 0.029 | 87 | 3.2 | 3.8 | 4.2 | 2.5 | 3.4 |
| MSS7348T-682ME_ | 6.8 | 0.029 | 0.035 | 43 | 2.8 | 3.3 | 3.6 | 2.3 | 3.1 |
| MSS7348T-103ME_ | 10 | 0.038 | 0.045 | 27 | 2.2 | 2.6 | 2.9 | 2.2 | 3.0 |
| MSS7348T-153ME_ | 15 | 0.047 | 0.056 | 23 | 1.7 | 2.1 | 2.4 | 2.0 | 2.7 |
| MSS7348T-223ME_ | 22 | 0.067 | 0.080 | 18 | 1.5 | 1.8 | 2.0 | 1.7 | 2.3 |
| MSS7348T-333ME_ | 33 | 0.106 | 0.120 | 13 | 1.2 | 1.6 | 1.7 | 1.3 | 1.7 |
| MSS7348T-473ME_ | 47 | 0.132 | 0.150 | 12 | 1.0 | 1.2 | 1.4 | 1.2 | 1.6 |
| MSS7348T-683ME_ | 68 | 0.196 | 0.225 | 8.1 | 0.83 | 1.0 | 1.1 | 0.94 | 1.2 |
| MSS7348T-104ME_ | 100 | 0.297 | 0.320 | 7.0 | 0.71 | 0.84 | 0.92 | 0.77 | 1.0 |
| MSS7348T-154ME_ | 150 | 0.461 | 0.520 | 5.6 | 0.58 | 0.68 | 0.75 | 0.63 | 0.84 |
| MSS7348T-224ME_ | 220 | 0.586 | 0.624 | 4.8 | 0.50 | 0.58 | 0.64 | 0.55 | 0.74 |
| MSS7348T-334ME_ | 330 | 0.886 | 0.980 | 3.7 | 0.39 | 0.46 | 0.51 | 0.44 | 0.60 |
| MSS7348T-474ME_ | 470 | 1.28 | 1.38 | 3.1 | 0.35 | 0.41 | 0.45 | 0.37 | 0.50 |
| MSS7348T-684ME_ | 680 | 1.64 | 1.82 | 2.6 | 0.28 | 0.32 | 0.36 | 0.32 | 0.42 |
| MSS7348T-105ME_ | 1000 | 2.50 | 2.73 | 2.2 | 0.22 | 0.27 | 0.29 | 0.26 | 0.35 |

1. When ordering, please specify **termination** and **packaging** codes:

MSS7348T-105MEC

Termination: E = 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: C = 7" machine-ready reel. EIA-481 embossed plastic tape (250 parts 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 (1000 parts per full reel).

2. Inductance measured at 100 kHz, 0.1 Vrms, 0 Adc using a Coilcraft SMD-A fixture in an Agilent/HP 4263B LCR meter.

3. SRF measured using an Agilent/HP 8753D network analyzer and a Coilcraft SMD-D test fixture.

4. DC current at 25°C that causes the specified inductance drop from its value without current.

5. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

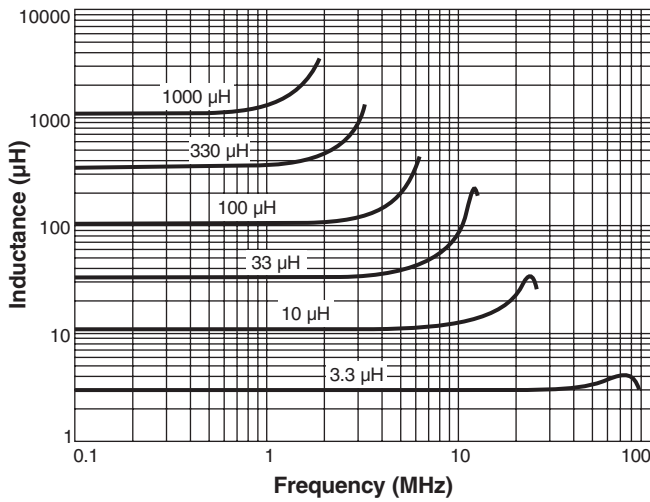
6. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

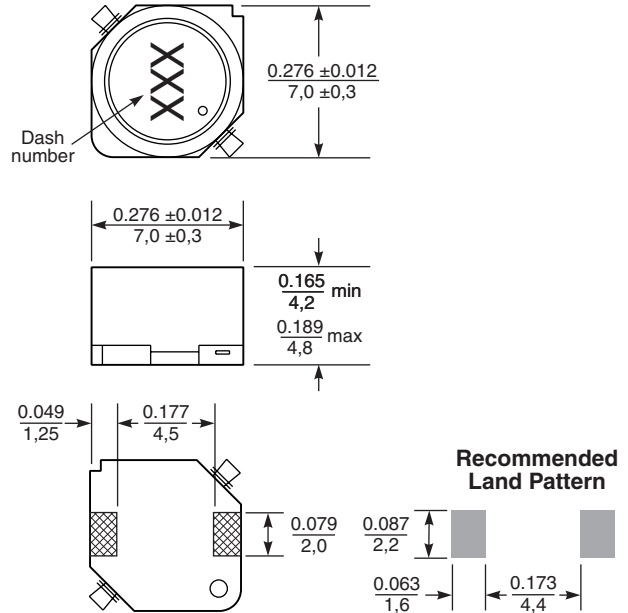
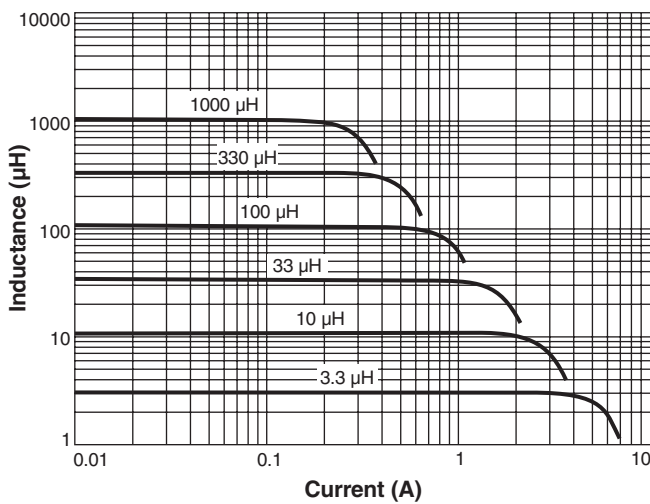


High Temperature Power Inductors – MSS7348T Series

Typical L vs Current



Typical L vs Frequency



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



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 1873-2 Revised 11/19/25
 © Coilcraft Inc. 2026
 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.