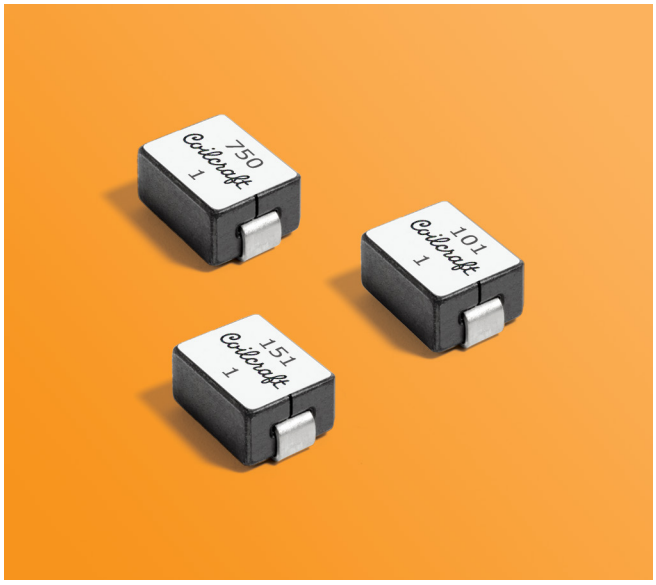
Shielded Power Inductors ST534PMM



- Designed for use in multi-phase VRM/VRD regulators and high current/high frequency DC/DC converters.
- Requires only 70 mm² of board space; can handle up to 61 A.

Core material Ferrite

Terminations Matte tin over nickel over copper. Other terminations available at additional cost.

Weight 1.25 – 1.30 g

Ambient temperature –40°C to +85°C with Irms current

Maximum part temperature +125°C

Storage temperature Component: –55°C to +125°C. Tape and reel packaging: –40°C to +80°C

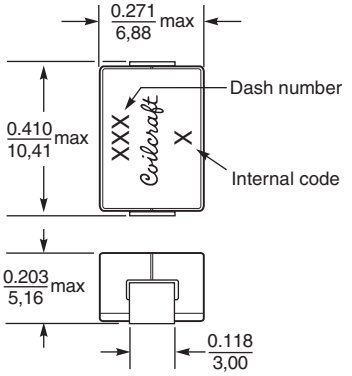
Resistance to soldering heat Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

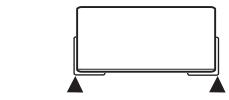
Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging 250/7″ reel Plastic tape: 24 mm wide, 0.35 mm thick, 12 mm pocket spacing, 5.08 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

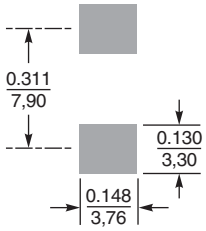
Part number[1]	L ±20%[2] (µH)	DCR (mOhms)[3] typ	DCR (mOhms)[3] max	SRF typ[4] (MHz)	Isat[5] (A)	Irms[6] (A)
ST534PMM750MLZ	0.075	0.230	0.246	200	61.0	43.0
ST534PMM101MLZ	0.100	0.230	0.246	145	50.0	43.0
ST534PMM121MLZ	0.125	0.230	0.246	140	37.0	43.0
ST534PMM151MLZ	0.150	0.230	0.246	133	30.0	43.0
ST534PMM231MLZ	0.230	0.230	0.246	70	25.5	43.0





▲Points used for measuring DCR

Suggested Land Pattern



Dimensions are in inches / mm

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

ST534PMM750MLZ

Termination: **L** = Matte tin over nickel over copper
Special order:
T = Tin-silver-copper (95.5/4/0.5) or
S = Tin-lead (63/37).

Testing: **Z** = Unscreened
H = Group A screening per Coilcraft CP-SA-10001
T = Screening per MIL-STD-981
U = Screening per EEE-INST-002
F = Screening per ESCC 3201
All screening performed to the document's latest revision
Custom screening also available

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4263B LCR meter or equivalent.
3. DCR is measured on a micro-ohmmeter at points indicated in the dimensional diagram.
4. SRF measured with coils connected in series using an Agilent/HP 8753ES network analyzer or equivalent.
5. DC current at 25°C that causes a 20% (typ) inductance drop from its value without current.
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.
7. Electrical specifications at 25°C.

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

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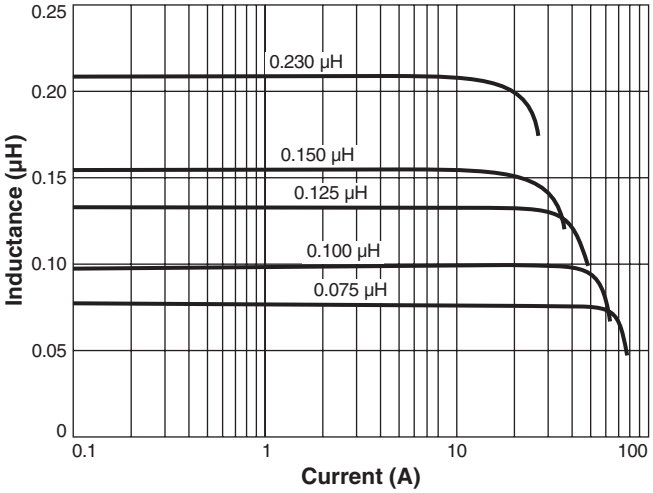
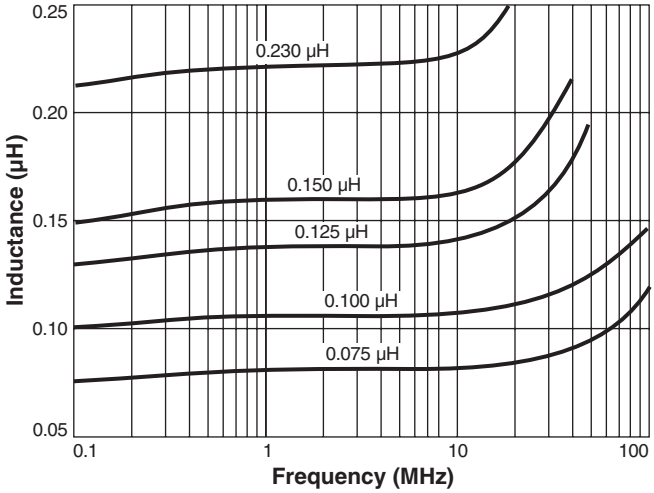
Document ST498-1 Revised 05/31/17

Shielded Power Inductors - ST534PMM Series

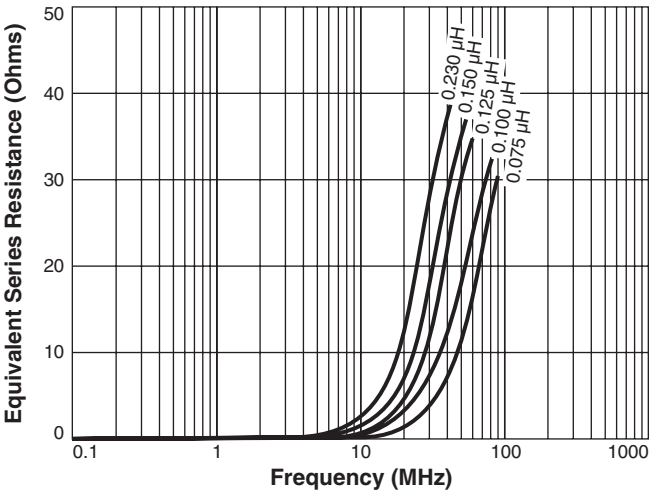
L vs Current



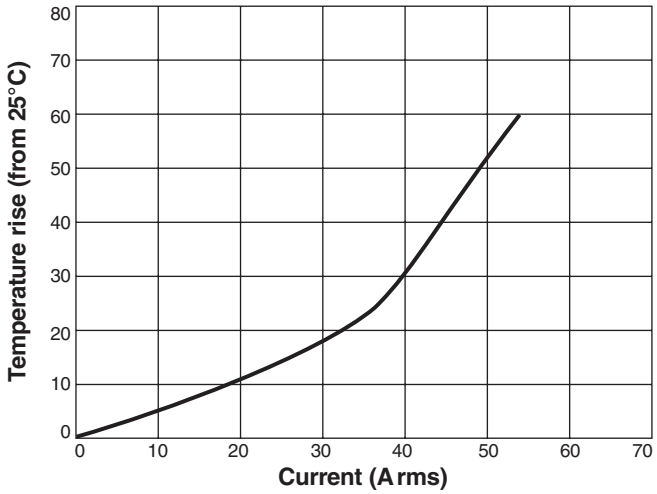
L vs Frequency



ESR vs Frequency



Typical Temperature Rise vs Current



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Document ST498-2 Revised 05/31/17