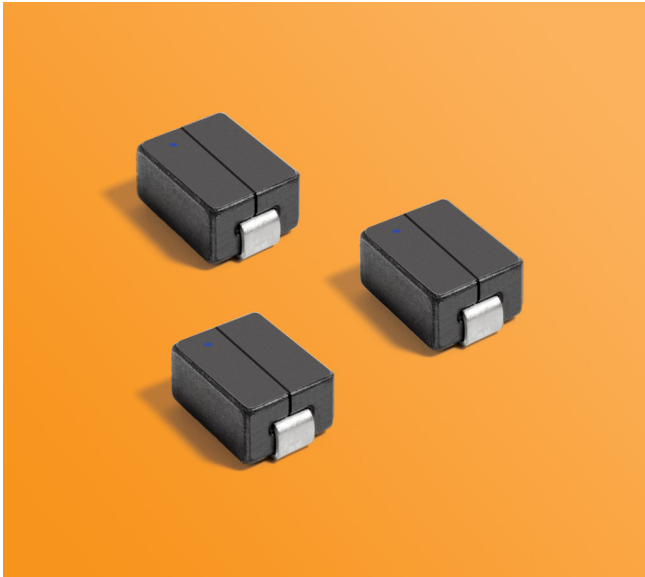


# Outgassing Compliant Power Inductors AE534PMM



- Designed for use in multi-phase VRM/VRD regulators and high current/high frequency DC/DC converters.
- Requires only 70 mm<sup>2</sup> of board space; can handle current up to 61 A.
- Passes NASA low outgassing specifications
- Tin-lead (Sn-Pb) terminations for the best possible board adhesion

**Core material** Ferrite

**Terminations** Tin-lead (63/37) over tin over nickel over copper.

**Weight** 1.25 – 1.30 g

**Ambient temperature** –55°C to +125°C with Irms current

**Maximum part temperature** +155°C (ambient + temp rise)

**Storage temperature** Component: –55°C to +155°C.

Tape and reel packaging: –40°C to +80°C

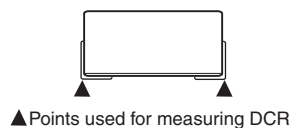
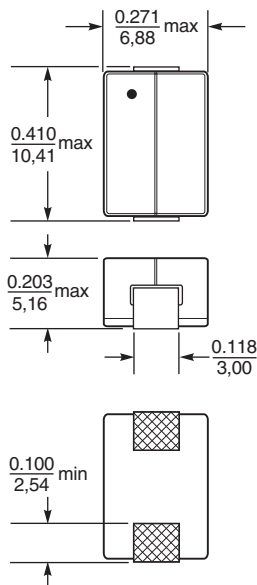
**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

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

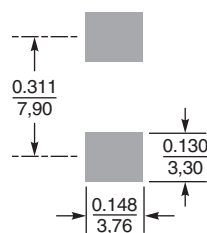
**Packaging** 250/7" reel; 1000/13" reel Plastic tape: 24 mm wide, 0.35 mm thick, 12 mm pocket spacing, 5.08 mm pocket depth

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787\\_PCB\\_Washing.pdf](#).

Part number <sup>1</sup>	L ±20% <sup>2</sup> (µH)	DCR (mOhms) <sup>3</sup>		SRF typ <sup>4</sup> (MHz)	Isat <sup>5</sup> (A)	Irms <sup>6</sup> (A)
		typ	max			
AE534PMM750MSZ	0.075	0.230	0.246	200	61.0	43.0
AE534PMM101MSZ	0.100	0.230	0.246	145	50.0	43.0
AE534PMM121MSZ	0.125	0.230	0.246	140	37.0	43.0
AE534PMM151MSZ	0.150	0.230	0.246	133	30.0	43.0
AE534PMM231MSZ	0.230	0.230	0.246	70	25.5	43.0



### Suggested Land Pattern



Dimensions are in inches  
mm

1. When ordering, please specify **testing** code:

**AE534PMM750MSZ**

**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 an inductance drop of 20% (typ) 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.

**Coilcraft CPS**

CRITICAL PRODUCTS & SERVICES

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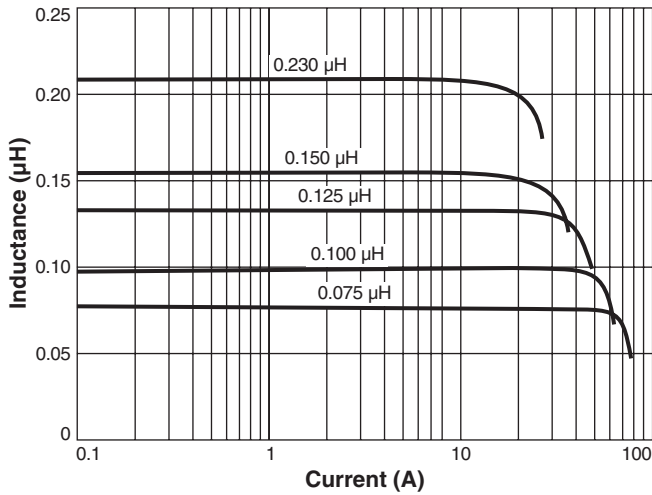
Fax 847-639-1508  
Email [cps@coilcraft.com](mailto:cps@coilcraft.com)  
[www.coilcraft-cps.com](http://www.coilcraft-cps.com)

Document AE498-1 Revised 05/31/17

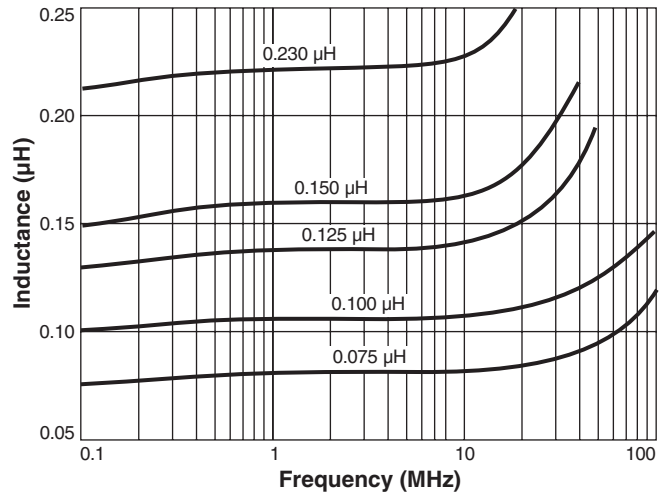
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

# Outgassing Compliant Power Inductors – AE534PMM Series

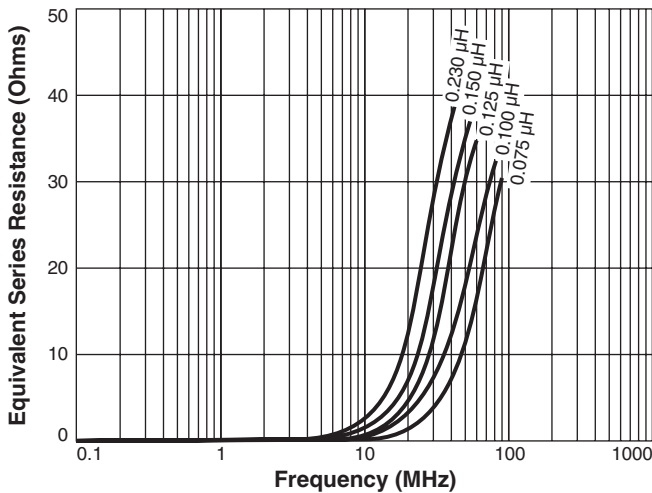
## L vs Current



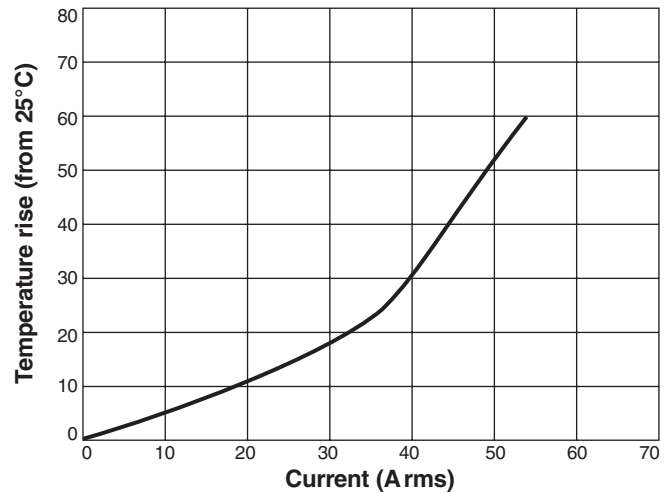
## L vs Frequency



## ESR vs Frequency



## Typical Temperature Rise vs Current



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Document AE498-2 Revised 05/31/17

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