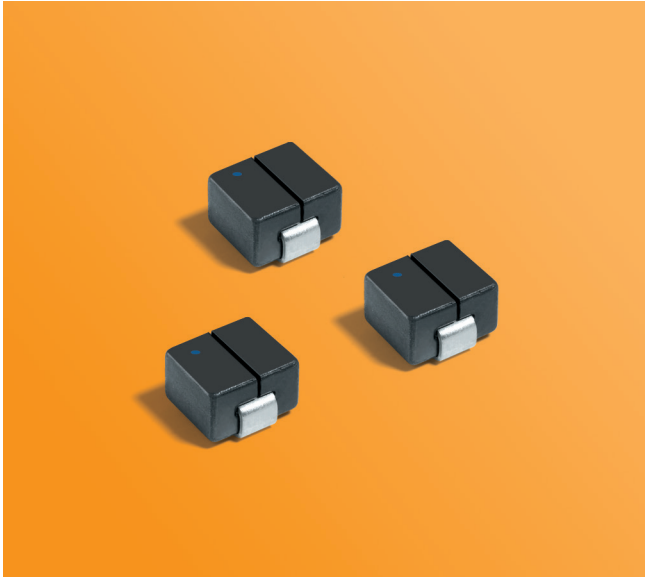


Outgassing Compliant Power Inductors AE528PMM



- Designed for use in multi-phase VRM/VRD regulators and high current/high frequency DC/DC converters.
- Requires only 60 mm² of board space; can handle up to 100 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 0.9 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 Plastic tape: 16 mm wide, 0.35 mm thick, 12 mm pocket spacing, 5 mm pocket depth

Part number ^{1,7}	L ±10% ² (nH)	DCR ±5% ³ (mOhms)	SRF ref ⁴ (MHz)	Isat ⁵ (A)	Irms ⁶ (A)
AE528PMM360KS_	36	0.17	1150	100	39
AE528PMM500KS_	50	0.17	900	84	39
AE528PMM700KS_	70	0.17	750	65	39
AE528PMM101KS_	100	0.17	110	42	39
AE528PMM121KS_	120	0.17	78	33	39
AE528PMM151KS_	150	0.17	67	27	39

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

AE528PMM151KSZ

- Screening:** Z = Unscreened
 Y = Unscreened (SLDC Option A)
 W = Unscreened (SLDC Option B)
 H = Group A screening per Coilcraft CP-SA-10001
 G = Coilcraft CP-SA-10001 Group A (SLDC Option A)
 D = Coilcraft CP-SA-10001 Group A (SLDC Option B)
 1 = EEE-INST-002 (Family 1) Level 1
 2 = EEE-INST-002 (Family 1) Level 2
 3 = EEE-INST-002 (Family 1) Level 3
 4 = MIL-STD-981 (Family 04) Class B
 5 = MIL-STD-981 (Family 04) Class S
 F = Screening per ESCC 3201
- Screening performed to the document's latest revision.
 - Lot qualification (Group B) available.
 - Testing T and U have been replaced with more detailed codes 4, 5, and 1, 2, 3, respectively. Codes T and U can still be used, if necessary. Custom testing also available.
 - Country of origin restrictions available; prefix options G or F.

2. Inductance tested at 100 kHz, 0.1 Vrms using an Agilent/HP 4263B LCR meter or equivalent.
 3. DCR is measured between the two points indicated on the dimensional drawing.
 4. This information is for design purposes only and shall not be tested during screening.
 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. Due to the design of this component, DWV and IR shall not be specified or tested.
 8. Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Coilcraft CPS
 CRITICAL PRODUCTS & SERVICES

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 Phone 800-981-0363

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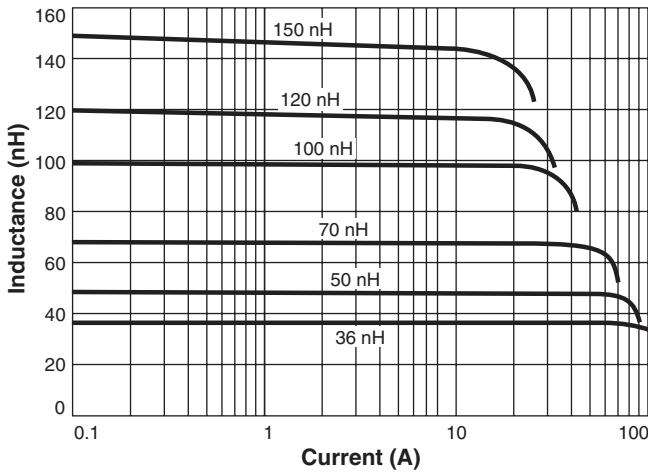
Fax 847-639-1508
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Document AE481-1 Revised 08/11/23

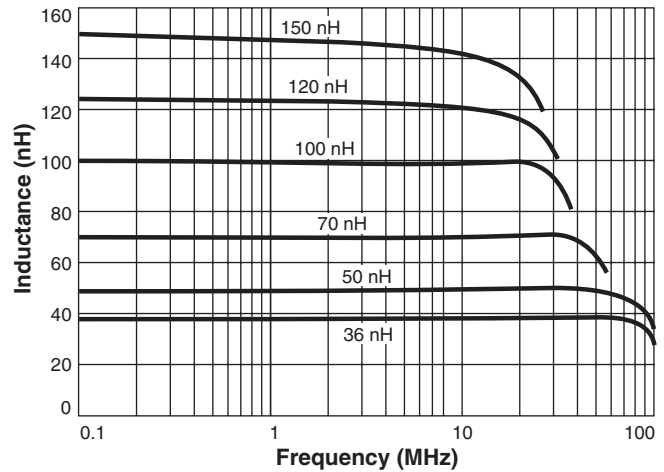
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Outgassing Compliant Power Inductors – AE528PMM Series

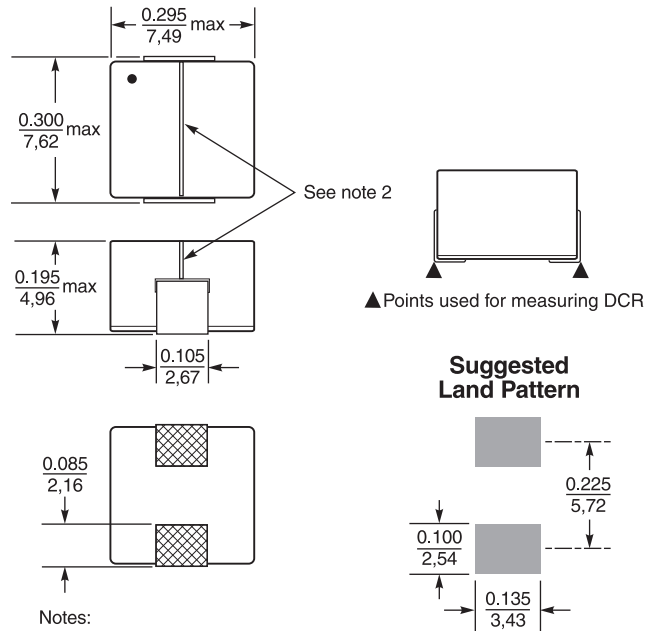
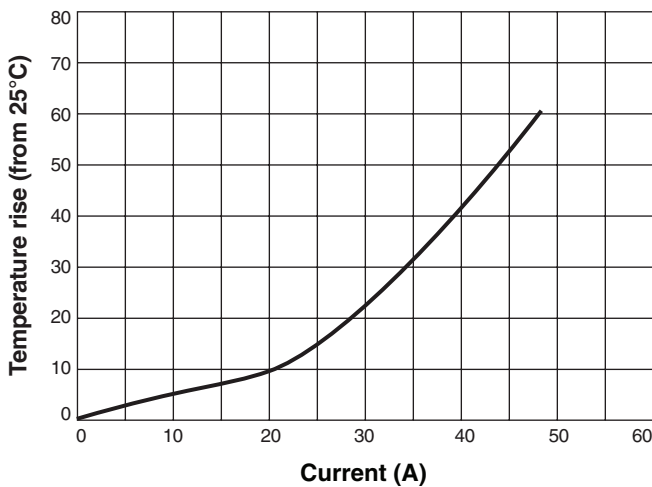
L vs Current



L vs Frequency



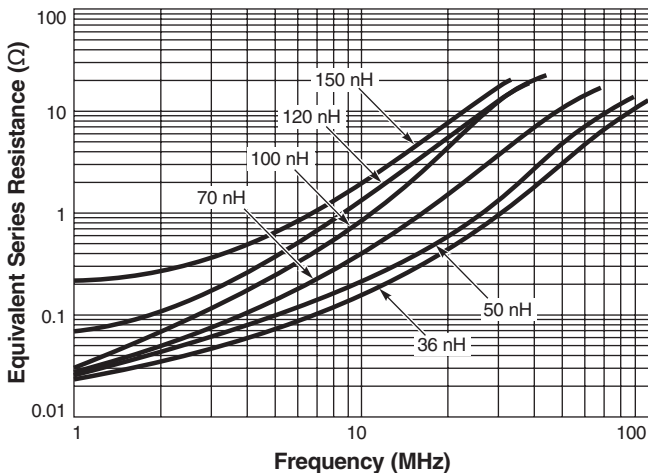
Temperature Rise vs Current



Notes:

1. Dimensions are in $\frac{\text{inches}}{\text{mm}}$
2. Top surface is divided by a slot which should be considered when handled by a vacuum pick-and-place process.

ESR vs Frequency



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