

# Outgassing Compliant Power Inductors AE369PJB



- High temperature materials allow operation in ambient temperatures up to 155°C
- Passes NASA low outgassing specifications
- Special construction allows it to pass vibration testing to 80 G and shock testing to 1000 G.
- Tin-lead (Sn-Pb) termination for the best possible board adhesion

**Core material** Ferrite

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

**Weight** 27 – 32 mg

**Ambient temperature** –55°C to +105°C with (40°C) Irms current

**Maximum part temperature** +155°C (Ambient + temperature rise)

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

Tape and reel 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)

**Enhanced crush-resistant packaging** 1000/7" reel

Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.37 mm pocket depth

**Recommended pick and place nozzle** OD: 3 mm; ID: ≤1.5 mm

Part number <sup>1</sup>	Inductance <sup>2</sup> ±20% (µH)	DCR max <sup>3</sup> (Ohms)	SRF (MHz) <sup>4</sup>		Isat (A) <sup>5</sup>			Irms (A) <sup>6</sup>	
			min	typ	10% drop	20% drop	30% drop	20°C rise	40°C rise
AE369PJB561MSZ	0.56	0.072	231	330	1.8	2.0	2.1	1.1	1.6
AE369PJB801MSZ	0.80	0.092	178	255	1.6	1.7	1.8	0.88	1.3
AE369PJB102MSZ	1.0	0.125	154	220	1.3	1.4	1.5	0.72	1.0
AE369PJB152MSZ	1.5	0.134	119	170	1.1	1.3	1.3	0.70	0.96
AE369PJB222MSZ	2.2	0.175	105	150	1.0	1.1	1.1	0.68	0.88
AE369PJB332MSZ	3.3	0.285	79.8	114	0.81	0.86	0.88	0.59	0.76
AE369PJB472MSZ	4.7	0.350	60.9	87	0.68	0.73	0.74	0.54	0.64
AE369PJB562MSZ	5.6	0.450	54.6	78	0.62	0.67	0.70	0.46	0.58
AE369PJB682MSZ	6.8	0.500	52.5	75	0.58	0.61	0.63	0.40	0.54
AE369PJB822MSZ	8.2	0.600	42.7	61	0.52	0.56	0.58	0.36	0.48
AE369PJB103MSZ	10	0.650	39.2	56	0.46	0.51	0.52	0.34	0.45
AE369PJB123MSZ	12	0.790	34.3	49	0.45	0.48	0.50	0.30	0.40
AE369PJB183MSZ	18	1.25	26.6	38	0.35	0.38	0.40	0.26	0.35
AE369PJB223MSZ	22	1.50	24.5	35	0.29	0.33	0.34	0.23	0.30
AE369PJB333MSZ	33	2.30	16.1	23	0.27	0.30	0.31	0.20	0.26
AE369PJB473MSZ	47	3.00	14.7	21	0.22	0.23	0.24	0.17	0.22
AE369PJB683MSZ	68	4.75	12.6	18	0.18	0.19	0.20	0.14	0.18
AE369PJB104MSZ	100	6.85	9.8	14	0.15	0.16	0.16	0.13	0.17
AE369PJB124MSZ	120	7.00	9.1	13	0.084	0.094	0.10	0.11	0.15
AE369PJB154MSZ	150	8.00	7.7	11	0.080	0.088	0.092	0.10	0.14
AE369PJB184MSZ	180	9.00	7.0	10	0.070	0.078	0.082	0.10	0.13
AE369PJB224MSZ	220	11.50	6.3	9	0.067	0.073	0.076	0.080	0.12
AE369PJB334MSZ	330	18.00	4.9	7	0.059	0.064	0.066	0.070	0.10

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

**AE369PJB104MSZ**

**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 4192A or equivalent.

3. DCR measured on a micro-ohmmeter.

4. SRF measured using an Agilent/HP 8753ES or equivalent.

5. DC current that causes the specified 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.

Document AE438-1 Revised 08/01/17

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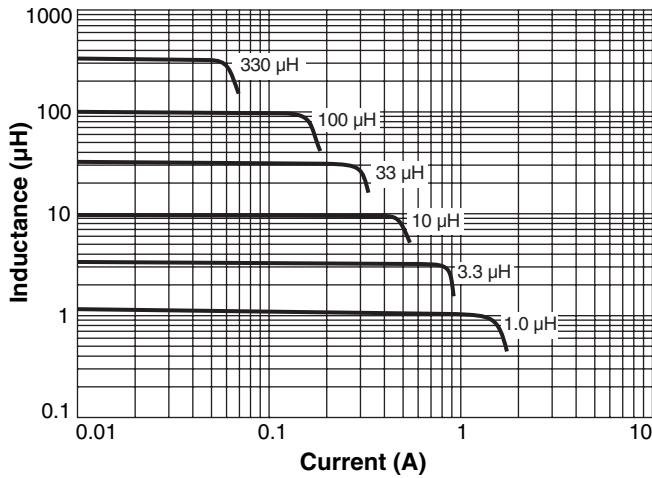
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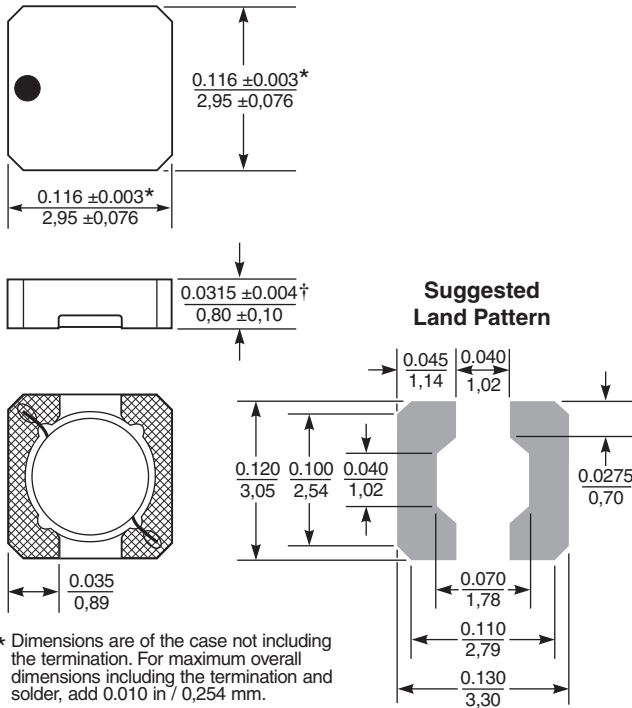
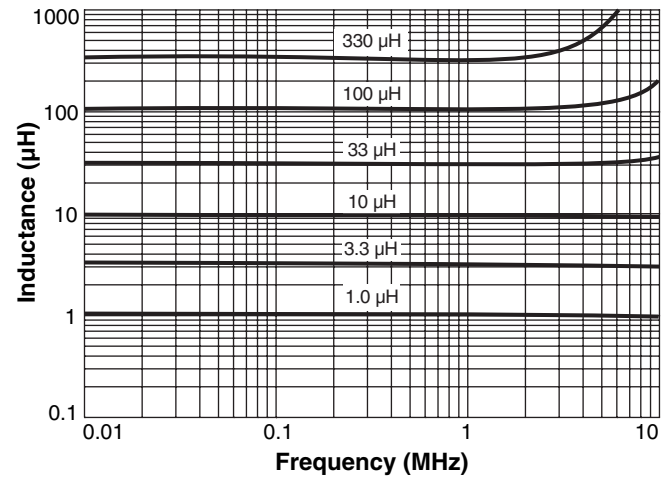
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# AE369PJB Series (3008)

## Typical L vs Current



## Typical L vs Frequency



\* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination and solder, add 0.010 in / 0,254 mm.

† Height dimension is after mounting. For maximum height dimension before mounting, add 0.006 in / 0,152 mm.

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



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Document AE438-2 Revised 08/01/17

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