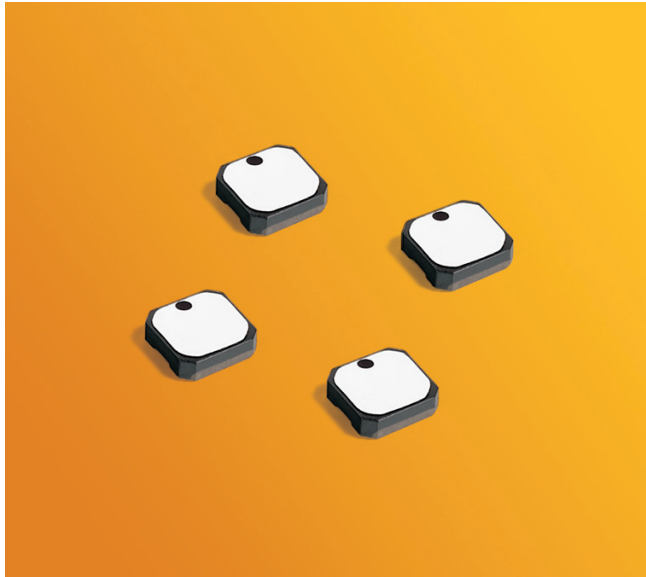


# High Reliability Power Inductors ML369PJB



- High temperature materials allow operation in ambient temperatures up to 155°C
- Special construction allows it to pass vibration testing to 80 G and shock testing to 1000 G.

**Core material** Ferrite

**Terminations** Silver-palladium-platinum-glass frit.

**Weight** 22 – 25 mg

**Ambient temperature** –55°C to +105°C with Irms current, +105°C to +155°C with derated current

**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
ML369PJB561MLZ	0.56	0.072	231	330	1.8	2.0	2.1	1.1	1.6
ML369PJB801MLZ	0.80	0.092	178	255	1.6	1.7	1.8	0.88	1.3
ML369PJB102MLZ	1.0	0.125	154	220	1.3	1.4	1.5	0.72	1.0
ML369PJB152MLZ	1.5	0.134	119	170	1.1	1.3	1.3	0.70	0.96
ML369PJB222MLZ	2.2	0.175	105	150	1.0	1.1	1.1	0.68	0.88
ML369PJB332MLZ	3.3	0.285	79.8	114	0.81	0.86	0.88	0.59	0.76
ML369PJB472MLZ	4.7	0.350	60.9	87	0.68	0.73	0.74	0.54	0.64
ML369PJB562MLZ	5.6	0.450	54.6	78	0.62	0.67	0.70	0.46	0.58
ML369PJB682MLZ	6.8	0.500	52.5	75	0.58	0.61	0.63	0.40	0.54
ML369PJB822MLZ	8.2	0.600	42.7	61	0.52	0.56	0.58	0.36	0.48
ML369PJB103MLZ	10	0.650	39.2	56	0.46	0.51	0.52	0.34	0.45
ML369PJB123MLZ	12	0.790	34.3	49	0.45	0.48	0.50	0.30	0.40
ML369PJB183MLZ	18	1.25	26.6	38	0.35	0.38	0.40	0.26	0.35
ML369PJB223MLZ	22	1.50	24.5	35	0.29	0.33	0.34	0.23	0.30
ML369PJB333MLZ	33	2.30	16.1	23	0.27	0.30	0.31	0.20	0.26
ML369PJB473MLZ	47	3.00	14.7	21	0.22	0.23	0.24	0.17	0.22
ML369PJB683MLZ	68	4.75	12.6	18	0.18	0.19	0.20	0.14	0.18
ML369PJB104MLZ	100	6.85	9.8	14	0.15	0.16	0.16	0.13	0.17
ML369PJB124MLZ	120	7.00	9.1	13	0.084	0.094	0.10	0.11	0.15
ML369PJB154MLZ	150	8.00	7.7	11	0.080	0.088	0.092	0.10	0.14
ML369PJB184MLZ	180	9.00	7.0	10	0.070	0.078	0.082	0.10	0.13
ML369PJB224MLZ	220	11.50	6.3	9	0.067	0.073	0.076	0.080	0.12
ML369PJB334MLZ	330	18.00	4.9	7	0.059	0.064	0.066	0.070	0.10

1. When ordering, please specify testing code:

ML369PJB104MLZ

Testing: Z = COTS

H = Screening per Coilcraft CP-SA-10001

N = Screening per Coilcraft CP-SA-10004

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. Typical DC current at which the inductance drops the specified amount from its value without current.

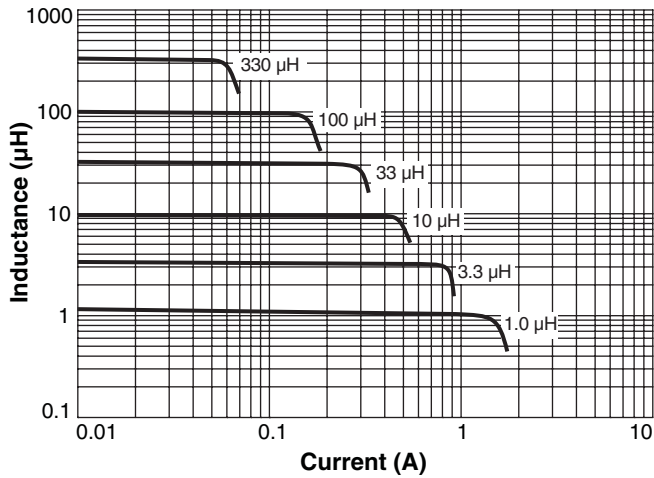
6. Typical current that causes the specified temperature rise from 25°C ambient.

7. Electrical specifications at 25°C.

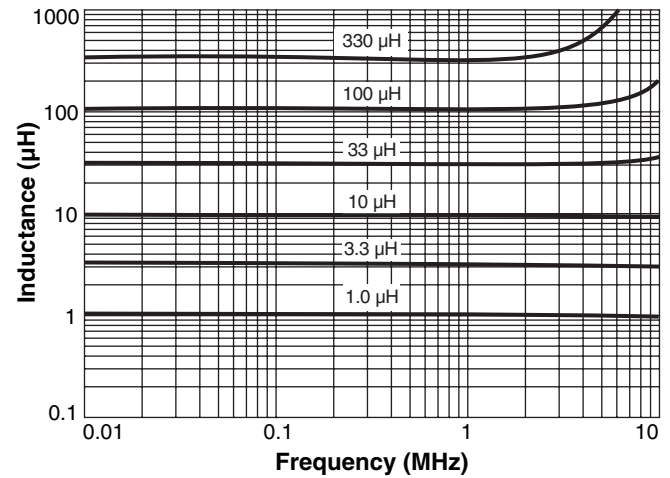
Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

# ML369PJB Series (3008)

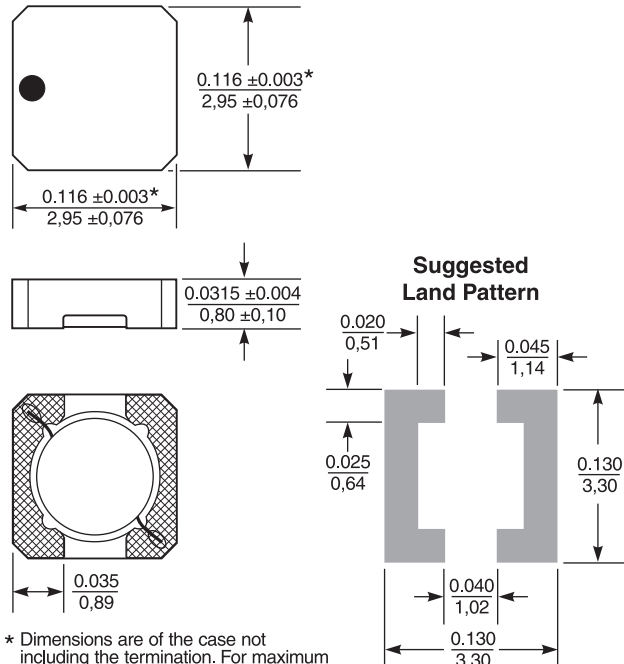
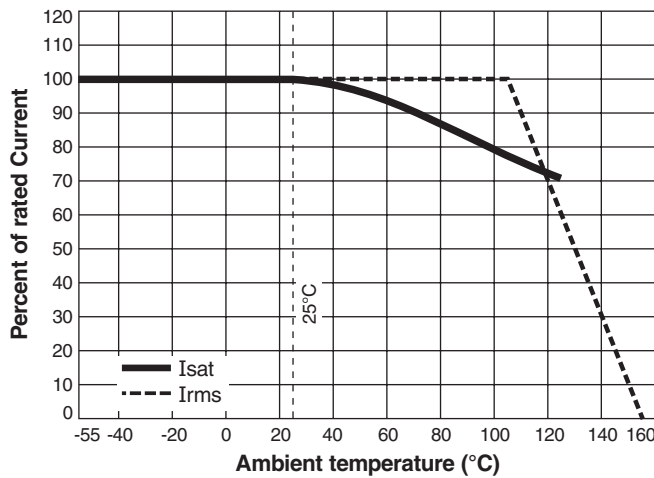
## Typical L vs Current



## Typical L vs Frequency



## Current Derating



\* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, add 0.005 in / 0.13 mm.

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