

# High-Reliability Power Inductors ML528PJB



- High temperature materials allow operation in ambient temperatures up to 155°C.
- Special construction allows it to pass vibration testing to 30 G and shock testing to 100 G.

**Core material** Ferrite

**Terminations** Matte tin over nickel over silver.

**Weight** 0.82 – 1.25 g

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

**Maximum part temperature** +155°C (ambient + temp 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** 350/7" reel

Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 3.68 mm pocket depth

**Recommended pick and place nozzle** OD: 6.2 mm; ID: ≤ 3.1 mm

Part number <sup>1</sup>	Inductance <sup>2</sup> ± 20% (µH)	DCR (Ohms)		SRF (MHz)		Isat (A) <sup>3</sup>			Irms (A) <sup>4</sup>	
		typ	max	min	typ	10% drop	20% drop	30% drop	20°C rise	40°C rise
ML528PJB682MR_	6.8	0.059	0.075	53	63	3.6	3.9	4.0	1.80	2.40
ML528PJB103MR_	10	0.073	0.090	41	49	2.8	3.2	3.3	1.55	2.15
ML528PJB153MR_	15	0.092	0.110	27	23	2.5	2.7	2.7	1.35	1.85
ML528PJB223MR_	22	0.102	0.130	17	21	2.0	2.3	2.4	1.25	1.75
ML528PJB333MR_	33	0.121	0.145	10	12	1.8	2.0	2.1	1.20	1.60
ML528PJB473MR_	47	0.153	0.179	8.5	10	1.6	1.7	1.8	1.10	1.50
ML528PJB683MR_	68	0.193	0.223	7.4	8.7	1.2	1.3	1.4	0.95	1.35
ML528PJB104MR_	100	0.297	0.342	5.5	6.5	1.0	1.1	1.1	0.78	1.10
ML528PJB154MR_	150	0.379	0.442	4.2	5.0	0.88	0.93	0.95	0.70	0.95
ML528PJB224MR_	220	0.564	0.662	3.6	4.3	0.70	0.74	0.77	0.60	0.82
ML528PJB334MR_	330	0.834	0.95	2.5	3.0	0.52	0.58	0.61	0.48	0.65
ML528PJB474MR_	470	1.28	1.45	2.1	2.5	0.43	0.48	0.50	0.39	0.53
ML528PJB684MR_	680	1.88	2.23	1.8	2.2	0.33	0.39	0.43	0.32	0.44
ML528PJB105MR_	1000	2.92	3.22	1.1	1.3	0.31	0.34	0.36	0.23	0.32

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

**ML528PJB105MRZ**

**Screening: Z** = Unscreened

**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)

- Screening performed to the document's latest revision.
- Custom testing also available.
- Country of origin restrictions available; prefix options G or F.

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.

3. DC current at 25°C that causes the specified inductance drop from its value without current.

4. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

5. Electrical specifications at 25°C.

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

**Coilcraft CPS**  
CRITICAL PRODUCTS & SERVICES

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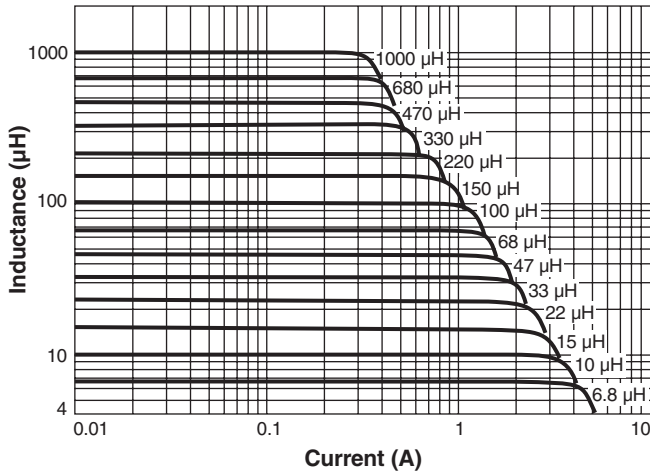
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Document ML968-1 Revised 11/19/21

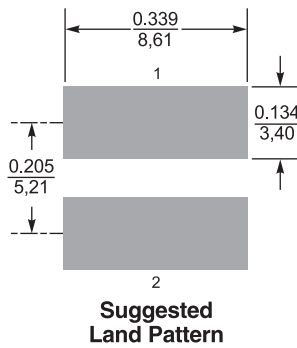
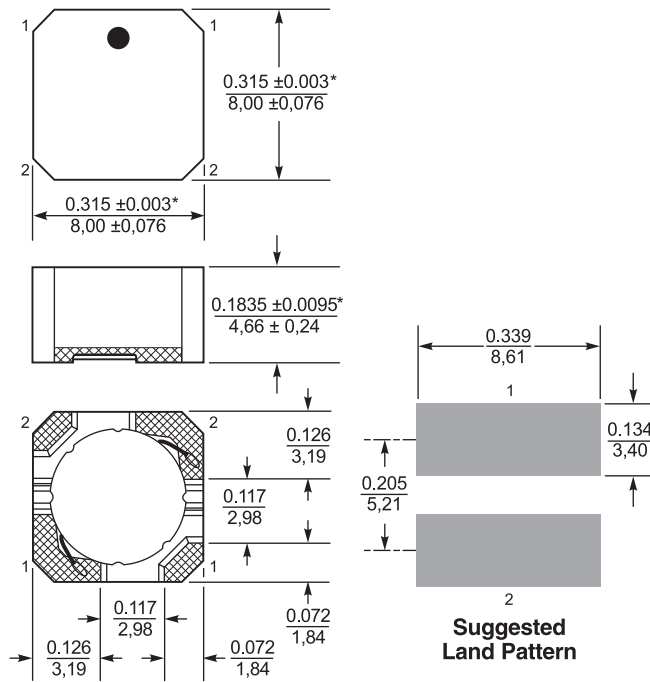
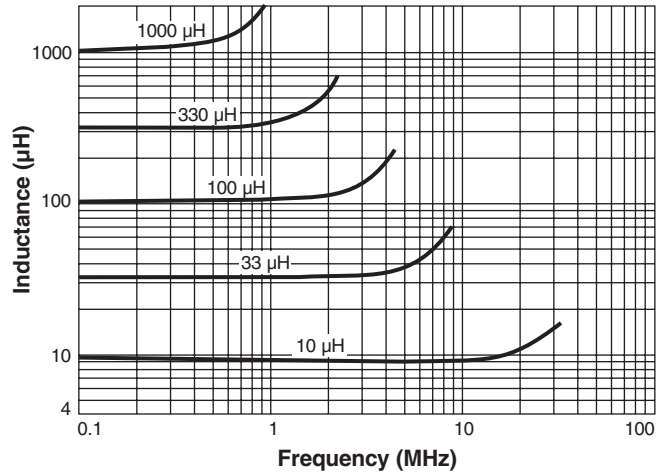
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# ML528PJB Series (8045)

## L vs Current



## Typical L vs Frequency



\* 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 inches / mm



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Document ML968-2 Revised 11/19/21

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