

High-Reliability Power Inductors MS528PJB



- 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.
- Tin-lead (Sn-Pb) termination for the best possible board adhesion

Core material Ferrite

Terminations Tin-lead (63/37) over leach-resistant silver-platinum-glass frit

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 ¹	Inductance ² ± 20% (µH)	DCR (Ohms)		SRF typ (MHz)	Isat (A) ³			Irms (A) ⁴	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
MS528PJB682MS_	6.8	0.059	0.075	63	3.6	3.9	4.0	1.80	2.40
MS528PJB103MS_	10	0.073	0.090	49	2.8	3.2	3.3	1.55	2.15
MS528PJB153MS_	15	0.092	0.110	23	2.5	2.7	2.7	1.35	1.85
MS528PJB223MS_	22	0.102	0.130	21	2.0	2.3	2.4	1.25	1.75
MS528PJB333MS_	33	0.121	0.145	12	1.8	2.0	2.1	1.20	1.60
MS528PJB473MS_	47	0.153	0.179	10	1.6	1.7	1.8	1.10	1.50
MS528PJB683MS_	68	0.193	0.223	8.7	1.2	1.3	1.4	0.95	1.35
MS528PJB104MS_	100	0.297	0.342	6.5	1.0	1.1	1.1	0.78	1.10
MS528PJB154MS_	150	0.379	0.442	5.0	0.88	0.93	0.95	0.70	0.95
MS528PJB224MS_	220	0.564	0.662	4.3	0.70	0.74	0.77	0.60	0.82
MS528PJB334MS_	330	0.834	0.950	3.0	0.52	0.58	0.61	0.48	0.65
MS528PJB474MS_	470	1.28	1.45	2.5	0.43	0.48	0.50	0.39	0.53
MS528PJB684MS_	680	1.88	2.23	2.2	0.33	0.39	0.43	0.32	0.44
MS528PJB105MS_	1000	2.92	3.22	1.3	0.31	0.34	0.36	0.23	0.32

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

MS528PJB105MSZ

Testing:

- Z = Unscreened
- H = Group A screening per Coilcraft CP-SA-10001
- N = Group A screening per Coilcraft CP-SA-10004
- J = Group A screening per Coilcraft CP-SA-10006
- 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

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.

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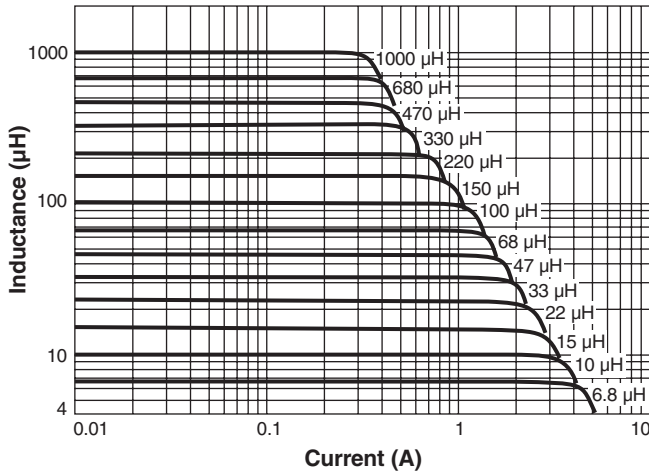
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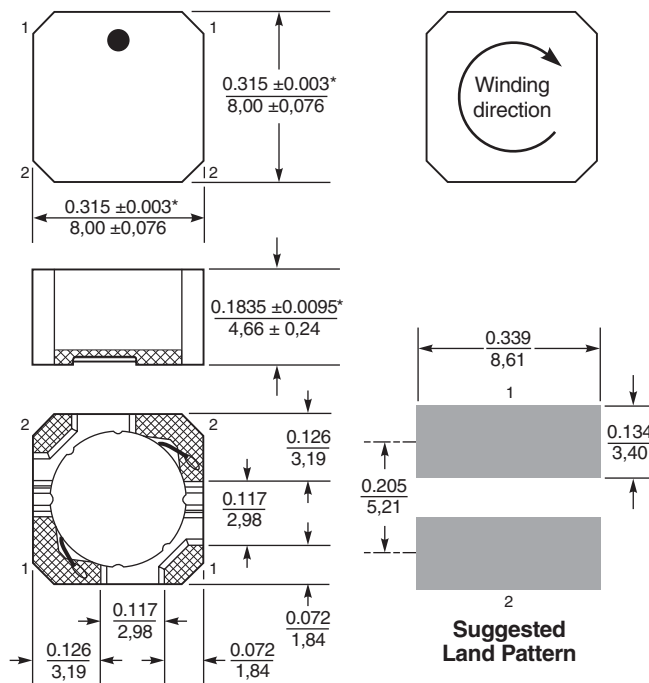
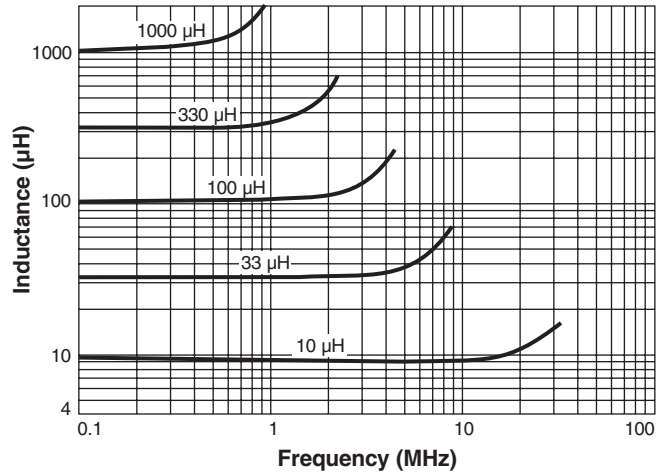
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specifications subject to change without notice. Please check our web site for latest information.

MS528PJB 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 0.026 in / 0.66 mm for length and width, and 0.005 in / 0.13 mm for height.

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

