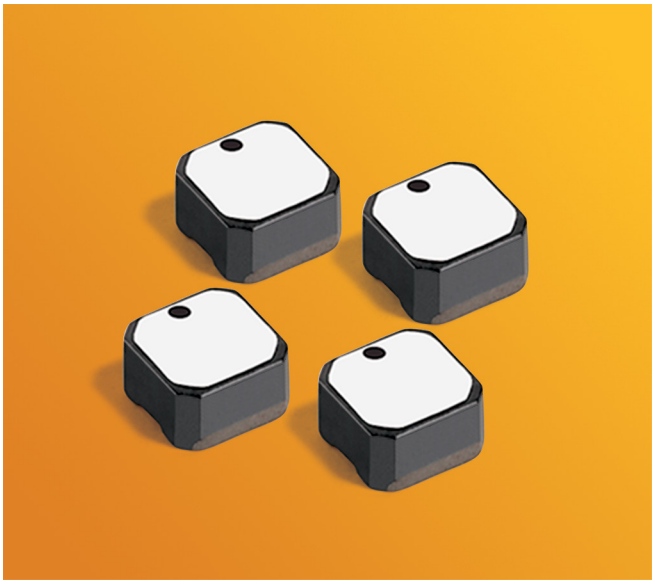
High-Reliability Power Inductors MS466PJB



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

Core material Ferrite
Terminations Tin-lead (63/37) over tin over nickel.
Weight 226 – 244 mg
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. 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 750/7″reel
Plastic tape: 12 mm wide, 0.32 mm thick, 8 mm pocket spacing, 3.1 mm pocket depth
Recommended pick and place nozzle OD: 5 mm; ID: ≤ 2.5 mm

Part number[1]	Inductance[2] ±20% (µH)	DCR max[3] (Ohms)	SRF (MHz)[4] min	SRF (MHz)[4] typ	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 40°C rise
MS466PJB901MSZ	0.90	0.040	175	250	3.8	4.0	4.1	1.7	2.2
MS466PJB122MSZ	1.2	0.043	147	210	3.5	3.6	3.7	1.6	2.1
MS466PJB172MSZ	1.7	0.051	133	190	3.0	3.2	3.3	1.5	2.0
MS466PJB222MSZ	2.2	0.057	118	168	2.9	3.1	3.2	1.3	1.7
MS466PJB332MSZ	3.3	0.066	88	125	2.3	2.5	2.6	1.1	1.4
MS466PJB472MSZ	4.7	0.083	59	84	1.9	2.0	2.0	1.0	1.4
MS466PJB562MSZ	5.6	0.089	49	70	1.8	1.8	1.9	1.0	1.3
MS466PJB682MSZ	6.8	0.099	39	56	1.6	1.7	1.7	1.0	1.3
MS466PJB822MSZ	8.2	0.125	32	45	1.6	1.7	1.7	0.88	1.2
MS466PJB103MSZ	10.0	0.127	21	30	1.4	1.4	1.4	0.80	1.2
MS466PJB123MSZ	12.0	0.155	17	24	1.3	1.4	1.4	0.76	1.1
MS466PJB153MSZ	15.0	0.160	22	32	0.80	0.90	0.90	0.74	1.1
MS466PJB183MSZ	18.0	0.170	19	27	0.80	0.82	0.87	0.72	1.0
MS466PJB223MSZ	22.0	0.190	17	24	0.70	0.75	0.78	0.70	1.0
MS466PJB333MSZ	33.0	0.260	13	19	0.60	0.63	0.64	0.68	0.96
MS466PJB473MSZ	47.0	0.330	11.0	16	0.50	0.53	0.55	0.60	0.80
MS466PJB683MSZ	68.0	0.440	8.4	12	0.40	0.43	0.44	0.52	0.72
MS466PJB823MSZ	82.0	0.470	7.7	11	0.38	0.40	0.40	0.48	0.66
MS466PJB104MSZ	100	0.600	7.0	10	0.27	0.31	0.32	0.44	0.60
MS466PJB124MSZ	120	0.800	6.3	9.0	0.26	0.29	0.30	0.36	0.53
MS466PJB154MSZ	150	0.860	5.3	7.5	0.22	0.25	0.263	0.34	0.46
MS466PJB224MSZ	220	1.35	4.2	6.0	0.21	0.235	0.245	0.29	0.40
MS466PJB334MSZ	330	1.80	3.5	5.0	0.155	0.155	0.200	0.26	0.34
MS466PJB474MSZ	470	2.80	2.8	4.0	0.117	0.134	0.146	0.22	0.30
MS466PJB564MSZ	560	3.20	2.5	3.6	0.110	0.130	0.140	0.18	0.26
MS466PJB684MSZ	680	3.80	2.1	3.0	0.100	0.120	0.126	0.16	0.23
MS466PJB105MSZ	1000	5.10	1.8	2.5	0.100	0.110	0.110	0.14	0.20
MS466PJB155MSZ	1500	7.60	1.4	2.0	0.068	0.080	0.089	0.12	0.17
MS466PJB185MSZ	1800	10.0	1.3	1.8	0.069	0.081	0.086	0.10	0.14
MS466PJB225MSZ	2200	11.0	1.1	1.6	0.063	0.074	0.080	0.080	0.12
MS466PJB335MSZ	3300	19.5	0.90	1.3	0.056	0.063	0.067	0.070	0.10
MS466PJB475MSZ	4700	26.0	0.80	1.1	0.049	0.056	0.059	0.065	0.090

1. When ordering, please specify **testing** code:
MS466PJB475MSZ
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.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using an Agilent/HP 8753ES or equivalent.
5. DC current at 25°C 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.

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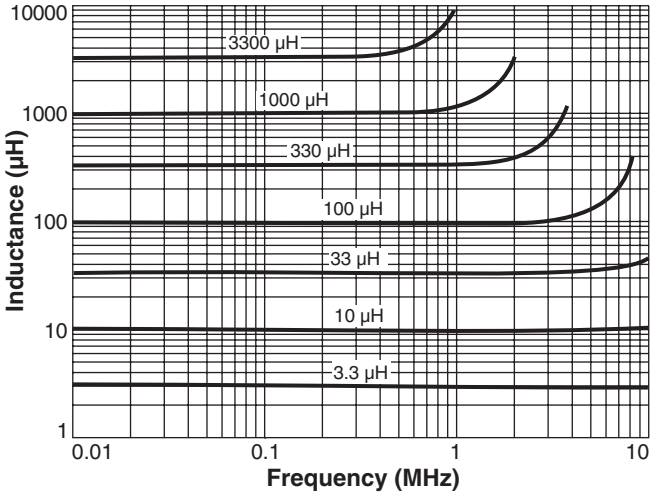
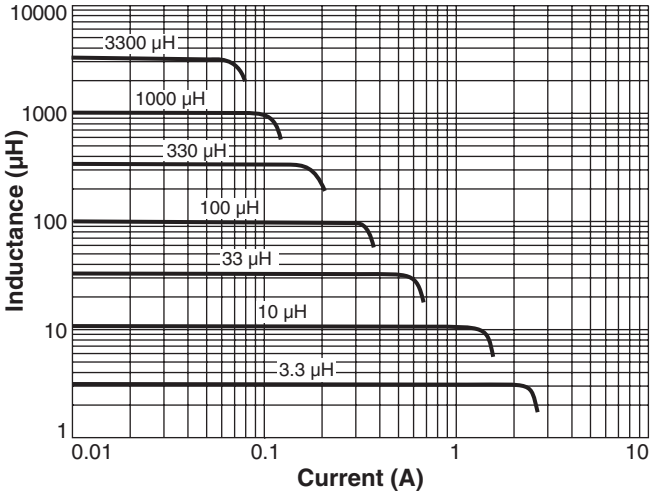
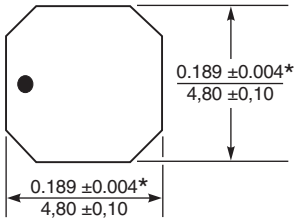
MS466PJB Series (5030)

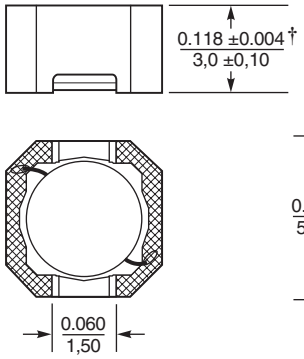
Typical L vs Frequency



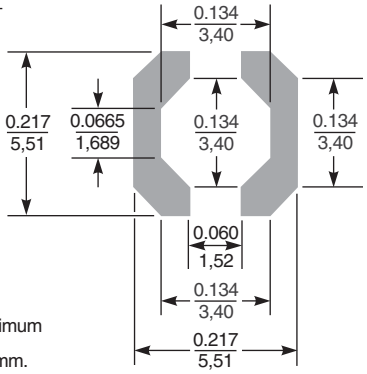
Typical L vs Current







Suggested Land Pattern



* Dimensions are of the case not including the termination. For maximum overall dimensions including the termination, 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 inches / mm

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