

**PRELIMINARY**

# High-Reliability Power Inductors ML466PJB



- 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** 226 – 244 mg

**Ambient temperature** –55°C to +105°C with I<sub>rms</sub> current, +105°C to +155°C with derated current

**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 <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>			I <sub>rms</sub> (A) <sup>6</sup>	
			min	typ	10% drop	20% drop	30% drop	20°C rise	40°C rise
ML466PJB901MLZ	0.90	0.040	175	250	3.8	4.0	4.1	2.10	2.80
ML466PJB122MLZ	1.2	0.043	147	210	3.5	3.6	3.7	2.00	2.65
ML466PJB172MLZ	1.7	0.051	133	190	3.0	3.2	3.3	1.90	2.50
ML466PJB222MLZ	2.2	0.057	118	168	2.9	3.1	3.2	1.60	2.15
ML466PJB332MLZ	3.3	0.066	88	125	2.3	2.5	2.6	1.40	1.80
ML466PJB472MLZ	4.7	0.083	59	84	1.9	2.0	2.0	1.30	1.75
ML466PJB562MLZ	5.6	0.089	49	70	1.8	1.8	1.9	1.25	1.65
ML466PJB682MLZ	6.8	0.099	39	56	1.6	1.7	1.7	1.20	1.60
ML466PJB822MLZ	8.2	0.125	32	45	1.6	1.7	1.7	1.10	1.55
ML466PJB103MLZ	10.0	0.127	21	30	1.4	1.4	1.4	1.00	1.50
ML466PJB123MLZ	12.0	0.155	17	24	1.3	1.4	1.4	0.95	1.40
ML466PJB153MLZ	15.0	0.160	22	32	0.80	0.90	0.90	0.92	1.40
ML466PJB183MLZ	18.0	0.170	19	27	0.80	0.82	0.87	0.90	1.30
ML466PJB223MLZ	22.0	0.190	17	24	0.70	0.75	0.78	0.88	1.25
ML466PJB333MLZ	33.0	0.260	13	19	0.60	0.63	0.64	0.85	1.20
ML466PJB473MLZ	47.0	0.330	11.0	16	0.50	0.53	0.55	0.75	1.00
ML466PJB683MLZ	68.0	0.440	8.4	12	0.40	0.43	0.44	0.65	0.900
ML466PJB823MLZ	82.0	0.470	7.7	11	0.38	0.40	0.40	0.60	0.830
ML466PJB104MLZ	100	0.600	7.0	10	0.27	0.31	0.32	0.55	0.750
ML466PJB124MLZ	120	0.800	6.3	9.0	0.26	0.29	0.30	0.45	0.660
ML466PJB154MLZ	150	0.860	5.3	7.5	0.22	0.25	0.263	0.42	0.570
ML466PJB224MLZ	220	1.35	4.2	6.0	0.21	0.235	0.245	0.36	0.500
ML466PJB334MLZ	330	1.80	3.5	5.0	0.155	0.155	0.200	0.32	0.420
ML466PJB474MLZ	470	2.80	2.8	4.0	0.117	0.134	0.146	0.28	0.370
ML466PJB564MLZ	560	3.20	2.5	3.6	0.110	0.130	0.140	0.23	0.320
ML466PJB684MLZ	680	3.80	2.1	3.0	0.100	0.120	0.126	0.20	0.290
ML466PJB105MLZ	1000	5.10	1.8	2.5	0.100	0.110	0.110	0.18	0.250
ML466PJB155MLZ	1500	7.60	1.4	2.0	0.068	0.080	0.089	0.15	0.210
ML466PJB185MLZ	1800	10.0	1.3	1.8	0.069	0.081	0.086	0.13	0.170
ML466PJB225MLZ	2200	11.0	1.1	1.6	0.063	0.074	0.080	0.10	0.150
ML466PJB335MLZ	3300	19.5	0.90	1.3	0.056	0.063	0.067	0.090	0.125
ML466PJB475MLZ	4700	26.0	0.80	1.1	0.049	0.056	0.059	0.080	0.110

1. When ordering, please specify testing code:

**ML466PJB475MLZ**

**Testing: Z = COTS**

**H = Screening per Coilcraft CP-SA-10001**

**N = Screening per Coilcraft CP-SA-10004**

**C = Custom screening (please specify when ordering)**

- Inductance tested at 100 kHz, 0.1 V<sub>rms</sub> using an Agilent/HP 4192A.
  - DCR measured on a micro-ohmmeter.
  - SRF measured using an Agilent/HP 8753ES or equivalent.
  - Typical DC current that causes the specified inductance drop from its value without current.
  - Typical current that causes the specified temperature rise from 25°C ambient.
  - Electrical specifications at 25°C.
- Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



CRITICAL PRODUCTS & SERVICES

These parts are preproduction products for electrical evaluation only.  
Specification subject to change without notice.

Document ML581-1 Revised 06/15/10

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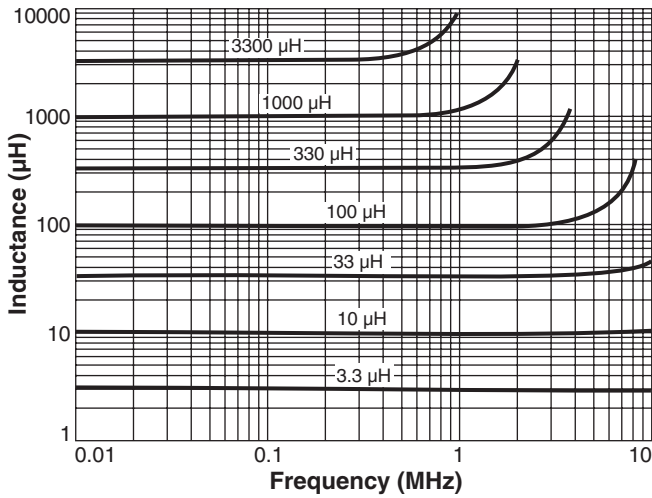
Phone 800-981-0363  
Fax 847-639-1508

E-mail cps@coilcraft.com  
Web www.coilcraft-cps.com

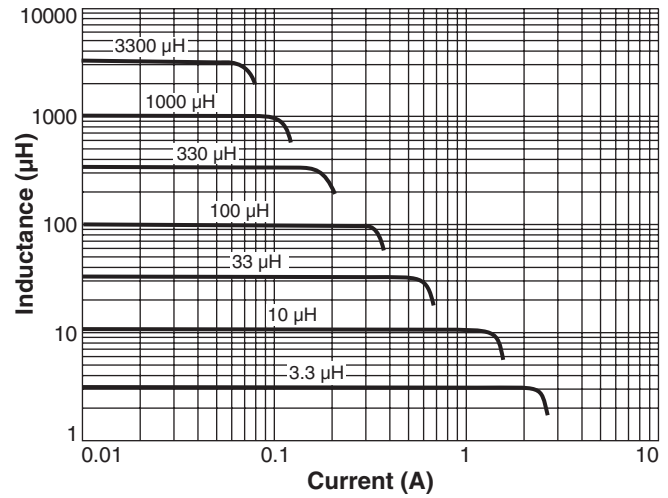
**PRELIMINARY**

# ML466PJB Series (5030)

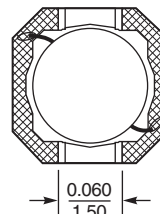
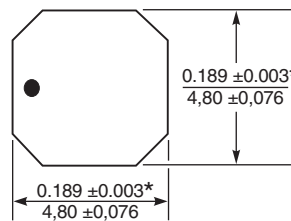
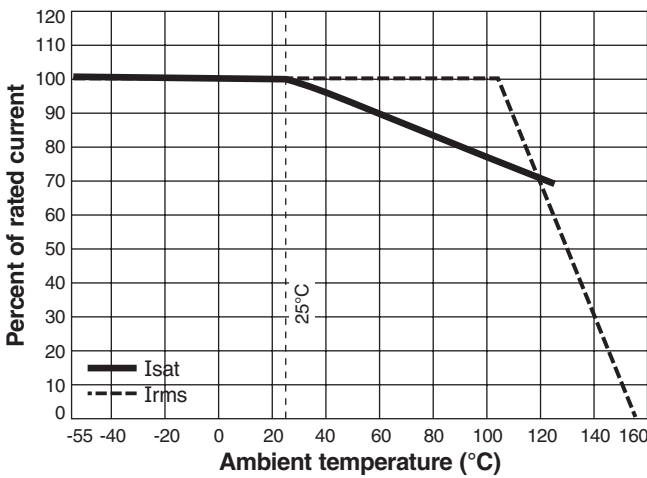
## Typical L vs Frequency



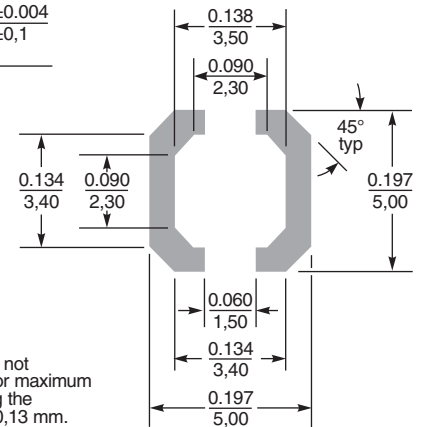
## Typical L vs Current



## Typical Current Derating



### Suggested Land Pattern



\* 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  $\frac{\text{inches}}{\text{mm}}$