High-Reliability Power Inductors ML486PJB

- 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 307 – 352 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, 0.3 mm thick, 8 mm pocket spacing, 2.57 mm pocket depth

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

Part number[1]	Inductance[2] ±20% (µH)	DCR[3] max (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
ML486PJB122MLZ	1.2	0.040	125	178	5.3	5.4	5.4	0.88	1.3
ML486PJB222MLZ	2.2	0.045	70	100	3.9	4.0	4.1	0.80	1.1
ML486PJB332MLZ	3.3	0.055	48	68	3.5	3.5	3.6	0.80	1.0
ML486PJB472MLZ	4.7	0.070	37	53	3.0	3.1	3.2	0.72	1.0
ML486PJB682MLZ	6.8	0.095	28	40	2.6	2.7	2.8	0.72	1.0
ML486PJB103MLZ	10	0.105	25	35	2.1	2.1	2.2	0.72	1.0
ML486PJB153MLZ	15	0.135	16	23	2.1	2.2	2.2	0.68	0.96
ML486PJB223MLZ	22	0.225	12	17	1.4	1.5	1.6	0.64	0.88
ML486PJB333MLZ	33	0.260	9.8	14	1.1	1.2	1.2	0.52	0.72
ML486PJB473MLZ	47	0.360	7.0	10	0.98	1.0	1.0	0.48	0.64
ML486PJB683MLZ	68	0.420	6.7	9.6	0.58	0.61	0.62	0.46	0.59
ML486PJB104MLZ	100	0.610	5.4	7.7	0.48	0.51	0.52	0.38	0.51
ML486PJB124MLZ	120	0.750	4.2	7.4	0.42	0.45	0.46	0.34	0.46
ML486PJB154MLZ	150	0.920	4.5	6.4	0.39	0.41	0.42	0.32	0.43
ML486PJB224MLZ	220	1.30	3.5	5.0	0.32	0.34	0.35	0.30	0.40
ML486PJB334MLZ	330	2.00	2.7	3.8	0.26	0.27	0.28	0.22	0.31
ML486PJB474MLZ	470	2.60	2.2	3.2	0.22	0.23	0.24	0.19	0.30
ML486PJB684MLZ	680	4.00	2.0	2.8	0.18	0.19	0.20	0.14	0.21
ML486PJB105MLZ	1000	6.00	1.6	2.3	0.15	0.16	0.17	0.12	0.19
ML486PJB155MLZ	1500	9.00	1.3	1.8	0.12	0.13	0.13	0.10	0.16
ML486PJB185MLZ	1800	11.7	1.2	1.7	0.11	0.12	0.12	0.090	0.11
ML486PJB225MLZ	2200	13.5	0.9	1.3	0.10	0.10	0.11	0.090	0.10
ML486PJB335MLZ	3300	21.0	0.8	1.1	0.099	0.10	0.11	0.065	0.090
ML486PJB475MLZ	4700	30.0	0.6	0.90	0.086	0.096	0.10	0.060	0.070
ML486PJB565MLZ	5600	36.0	0.5	0.72	0.077	0.090	0.096	0.055	0.070
ML486PJB685MLZ	6800	43.0	0.5	0.70	0.080	0.086	0.089	0.050	0.060
ML486PJB825MLZ	8200	54.0	0.5	0.69	0.079	0.086	0.088	0.050	0.060
ML486PJB106MLZ	10000	70.0	0.5	0.68	0.050	0.050	0.060	0.045	0.050

1. When ordering, please specify **screening** code:
ML486PJB106MLZ
Screening: Z = Unscreened
Y = Unscreened (SLDC Option A)
W = Unscreened (SLDC Option B)
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 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.

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

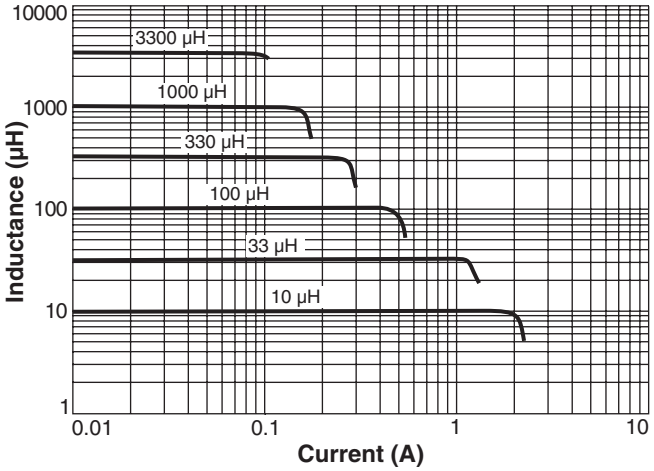
1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

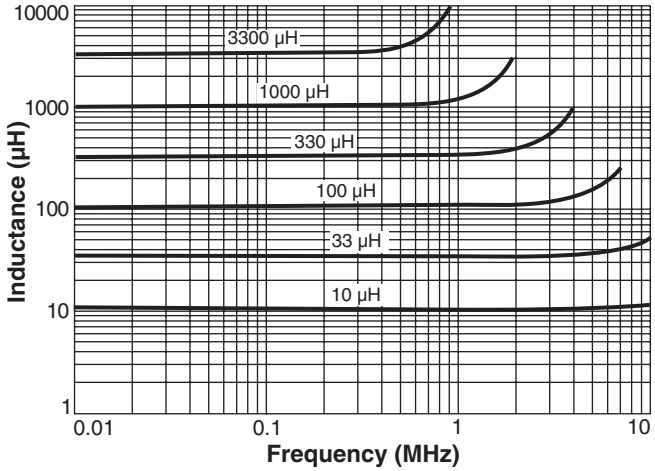
Document ML554-1 Revised 04/19/23

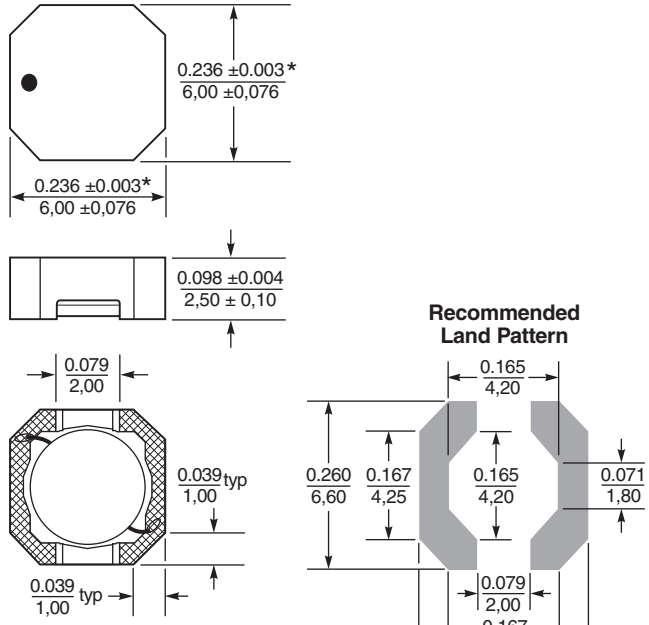
ML486PJB Series (6225)

Typical 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

Coilcraft CPS
CRITICAL PRODUCTS & SERVICES

1102 Silver Lake Road
Cary, IL 60013
Phone 800-981-0363

Fax 847-639-1508
Email cps@coilcraft.com
www.coilcraft-cps.com

Document ML554-2 Revised 04/19/23