NEW!

Shielded Power Inductors – EPL6024

- High current and very low DCR
- Soft saturation

Core material Ferrite

Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.

Environmental RoHS compliant, halogen free

Weight 0.28 – 0.34 g

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current.

Storage temperature Component: –40°C to +125°C. Tape and reel packaging: –40°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)

Failures in Time (FIT) / Mean Time Between Failures (MTBF) 38 per billion hours / 26,315,789 hours, calculated per Telcordia SR-332

Packaging 500/7″ reel; 2000/13″ reel Plastic tape: 16 mm wide, 0.3 mm thick, 12 mm pocket spacing, 2.54 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±20% (µH)	DCR (mOhms)[3] typ	DCR (mOhms)[3] max	SRF typ[4] (MHz)	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
EPL6024-681ME_	0.68	8.11	9.33	70.2	4.0	6.5	8.5	9.73	13.0
EPL6024-102ME_	1.0	9.94	11.43	53.8	3.5	6.0	7.5	9.23	12.5
EPL6024-152ME_	1.5	14.01	16.11	44.1	2.5	4.0	6.0	7.75	10.5
EPL6024-222ME_	2.2	17.87	20.55	36.9	2.0	3.5	5.5	7.05	9.40
EPL6024-332ME_	3.3	25.06	27.57	29.8	1.8	3.0	4.5	5.90	7.70
EPL6024-472ME_	4.7	40.52	44.57	24.8	1.5	2.5	3.5	4.57	5.77
EPL6024-522ME_	5.2	44.19	48.61	22.8	1.4	2.0	3.4	4.38	5.62

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

EPL6024-522MEC

Packaging: C = 7″ machine-ready reel. EIA-481 embossed plastic tape (500 parts per full reel).
B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory order only, not stocked (2000 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4395A or equivalent.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

Irms Testing

Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.

Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.

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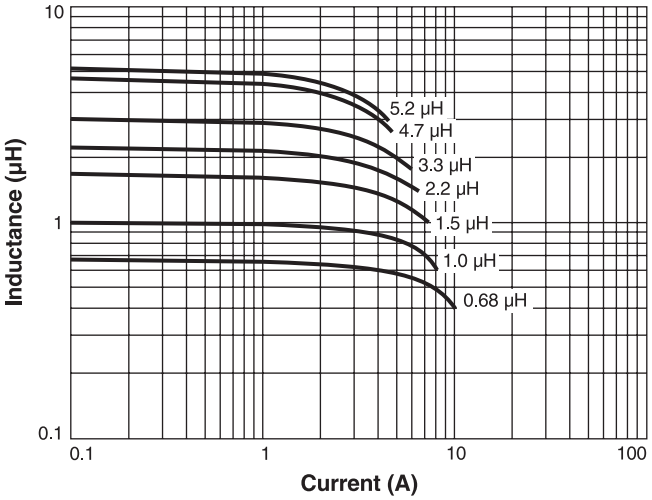
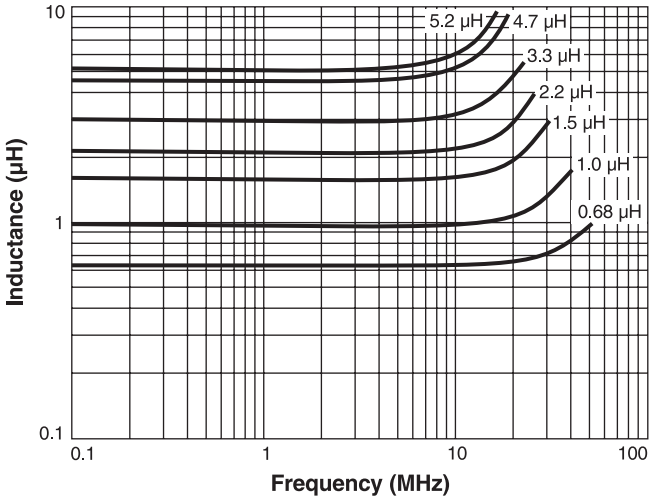
NEW!

Shielded Power Inductors – EPL6024

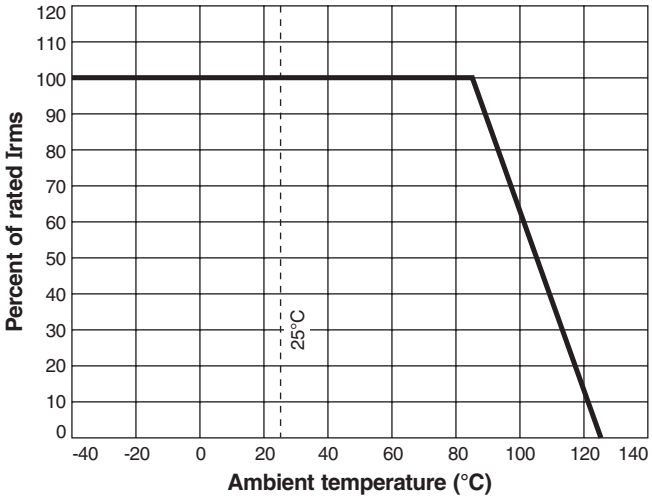
L vs Current

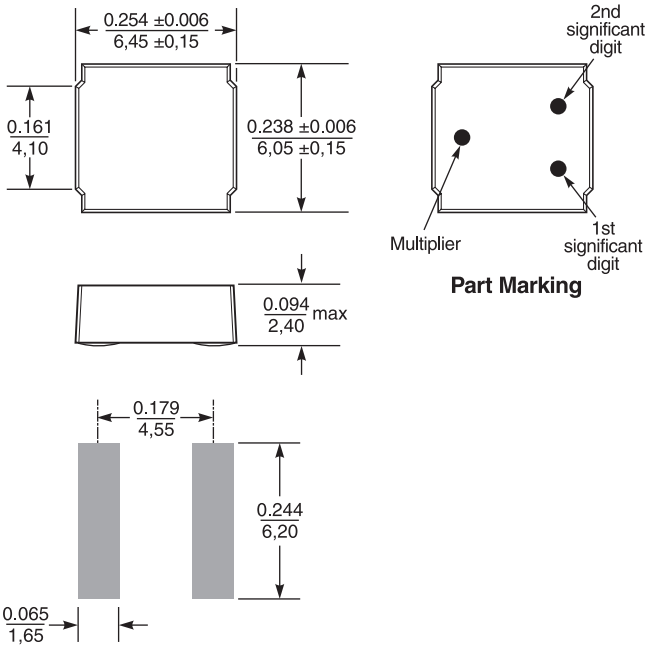


L vs Frequency



Irms Derating





Dimensions are in inches / mm

Part Marking

Part number	Value	1st digit	2nd digit	Multiplier
EPL6024-681	0.68 µH	Blue	Gray	Brown
EPL6024-102	1.0 µH	Brown	Black	Red
EPL6024-152	1.5 µH	Brown	Green	Red
EPL6024-222	2.2 µH	Red	Red	Red
EPL6024-332	3.3 µH	Orange	Orange	Red
EPL6024-472	4.7 µH	Yellow	Violet	Red
EPL6024-522	5.2 µH	Green	Red	Red

Note: All marked parts have three dots. Black dot, used only on -102 as second significant digit, may be very difficult to see.

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