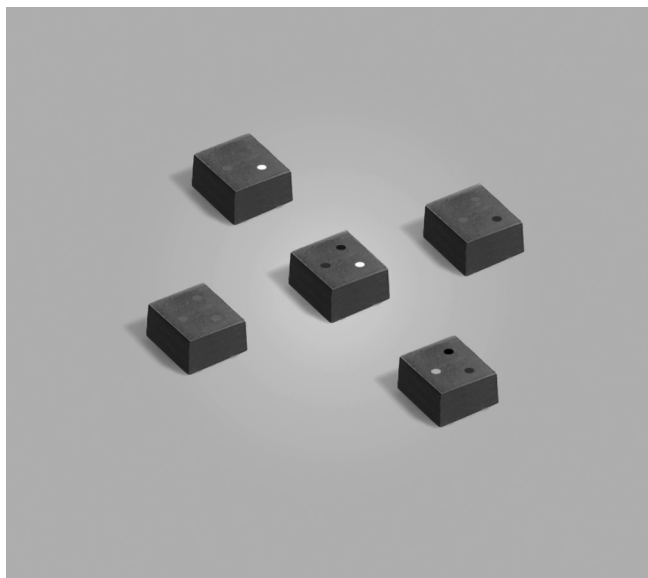


Shielded Power Inductors – EPL3015



- Low profile shielded power inductors, 3 × 3 × 1.5 mm
- Very low DCR, high SRF ratings, Isat ratings up to 2.4 A

Designer's Kit C405 contains 5 each of all values

Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

Environmental RoHS compliant, halogen free

Terminations RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum. Other terminations available at additional cost.

Weight 45 – 51 mg

Ambient temperature –40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

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 2000/7" reel; 7500/13" reel Plastic tape: 8 mm wide, 0.2 mm thick, 4 mm pocket spacing, 1.78 mm pocket depth

PCB washing Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

Part number ¹	Inductance ² ±20% (μH)	DCR (Ohms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
EPL3015-901ML_	0.90	0.048	0.055	130	1.20	1.90	2.40	1.85	2.45
EPL3015-122ML_	1.2	0.054	0.062	105	1.00	1.60	2.05	1.80	2.40
EPL3015-152ML_	1.5	0.062	0.072	100	0.90	1.40	1.90	1.55	2.05
EPL3015-222ML_	2.2	0.082	0.094	75	0.75	1.20	1.60	1.50	2.00
EPL3015-332ML_	3.3	0.108	0.124	55	0.65	1.10	1.40	1.20	1.70
EPL3015-472ML_	4.7	0.145	0.167	50	0.55	0.90	1.20	1.00	1.40
EPL3015-682ML_	6.8	0.194	0.223	38	0.45	0.75	1.00	0.90	1.20
EPL3015-103ML_	10	0.301	0.346	32	0.35	0.59	0.81	0.76	1.00
EPL3015-153ML_	15	0.435	0.500	26	0.24	0.43	0.62	0.61	0.82
EPL3015-223ML_	22	0.576	0.662	20	0.21	0.36	0.51	0.56	0.74
EPL3015-333ML_	33	0.860	0.989	15.5	0.19	0.32	0.45	0.44	0.59

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

EPL3015-333MLC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 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 (7500 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 network analyzer or equivalent.

5. DC current at 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information](#).

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. [Click for temperature derating information](#).

7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.



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Document 634-1 Revised 09/08/15

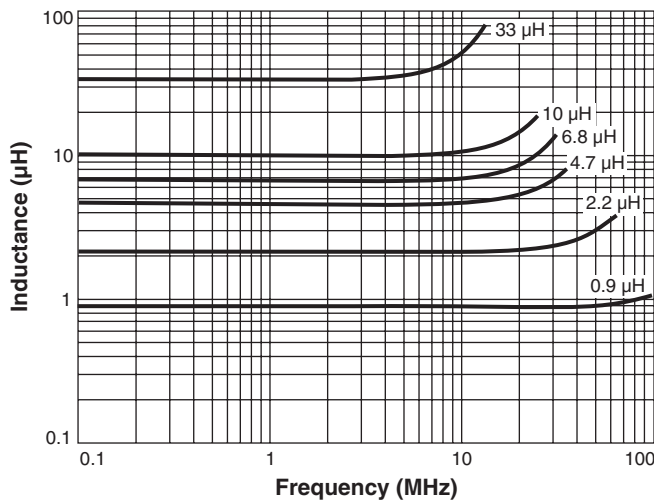
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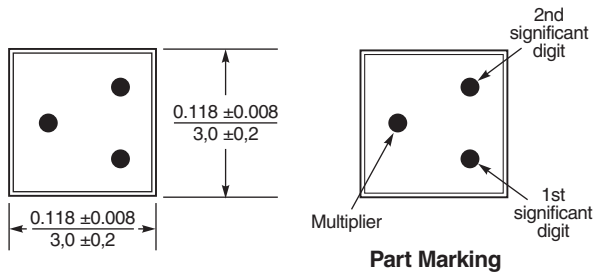
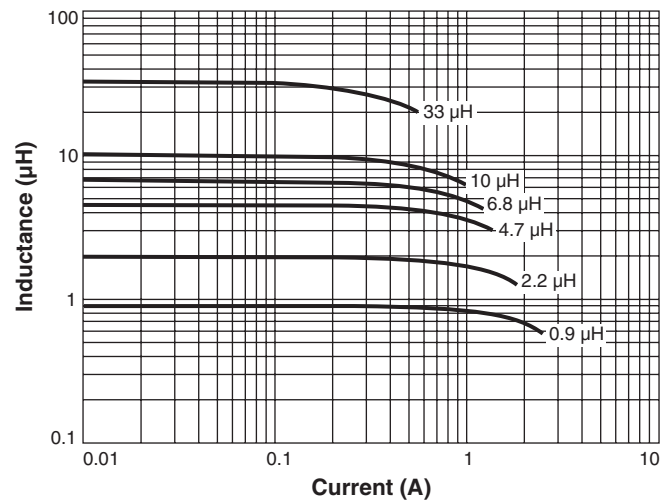


Shielded Power Inductors – EPL3015 Series

Typical L vs Frequency



Typical L vs Current

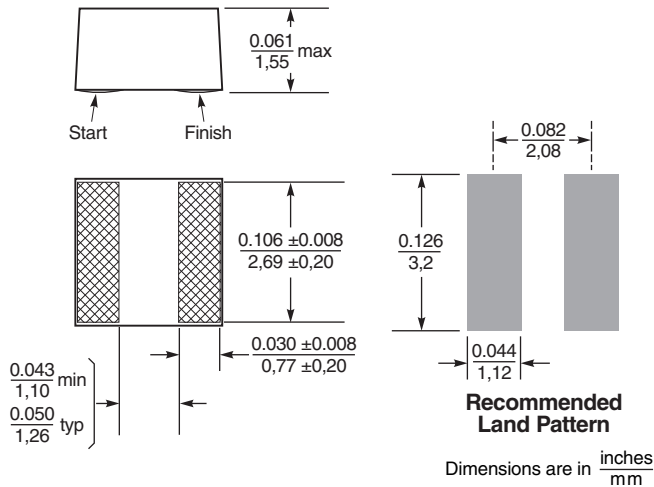


Part Marking

Part Marking (Parts manufactured prior to Sept. 15, 2009 may not be marked.)

Part number	Value	1st digit	2nd digit	Multiplier
EPL3015-901	0.90 μH	White	Black	Brown
EPL3015-122	1.2 μH	Brown	Red	Red
EPL3015-152	1.5 μH	Brown	Green	Red
EPL3015-222	2.2 μH	Red	Red	Red
EPL3015-332	3.3 μH	Orange	Orange	Red
EPL3015-472	4.7 μH	Yellow	Violet	Red
EPL3015-682	6.8 μH	Blue	Gray	Red
EPL3015-103	10 μH	Brown	Black	Orange
EPL3015-153	15 μH	Brown	Green	Orange
EPL3015-223	22 μH	Red	Red	Orange
EPL3015-333	33 μH	Orange	Orange	Orange

Note: All marked parts have three dots. Black dot, used only on -901 and -103 as second significant digit, may be very difficult to see.



Recommended Land Pattern

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

Small surface blemishes are not unusual and do not adversely affect performance. Wire may be visible inside the voids.

Acceptable void sizes:

Top: 0.01 in / 0,254 mm × 0.01 in / 0,254 mm

Sides: 0.02 in / 0,5 mm × 0.047 in / 1,2 mm



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Document 634-2 Revised 09/08/15

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