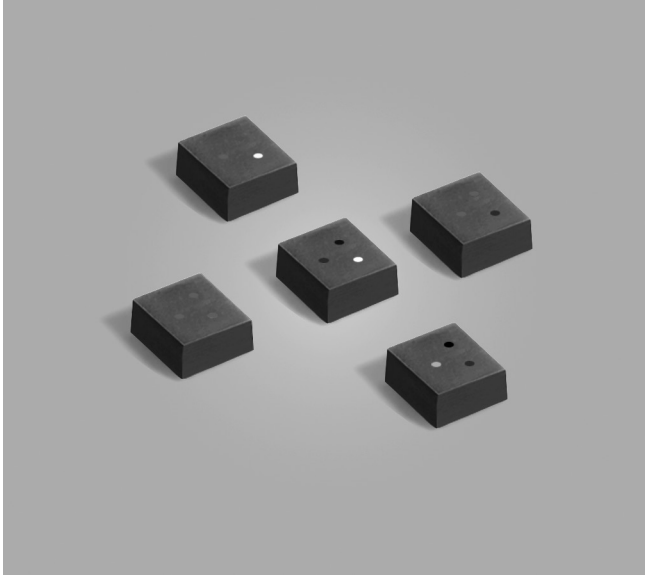


Shielded Power Inductors – EPL3314



- Small footprint, very low profile shielded power inductor
- Extremely low DCR, Isat ratings as high as 2.3 A

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 53 – 60 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)

Mean Time Between Failures (MTBF) 26,315,789 hours

Packaging 2000/7" reel; 7500/13" reel Plastic tape: 12 mm wide, 0.20 mm thick, 8 mm pocket spacing, 1.55 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
EPL3314-102ML_	1.0	0.052	0.060	125	1.1	1.8	2.3	1.9	2.5
EPL3314-222ML_	2.2	0.082	0.094	80	0.70	1.2	1.6	1.5	2.0
EPL3314-332ML_	3.3	0.116	0.133	60	0.60	1.0	1.4	1.3	1.7
EPL3314-472ML_	4.7	0.139	0.160	52	0.55	0.87	1.2	1.2	1.6
EPL3314-822ML_	8.2	0.252	0.290	37	0.35	0.58	0.82	0.84	1.1
EPL3314-103ML_	10	0.313	0.360	35	0.32	0.56	0.77	0.78	1.0
EPL3314-153ML_	15	0.408	0.469	25	0.27	0.47	0.66	0.67	0.89
EPL3314-473ML_	47	1.087	1.246	12.5	0.16	0.24	0.35	0.40	0.53

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

EPL3314-473MLC

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 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 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.



www.coilcraft.com

US +1-847-639-6400 sales@coilcraft.com

UK +44-1236-730595 sales@coilcraft-europe.com

Taiwan +886-2-2264 3646 sales@coilcraft.com.tw

China +86-21-6218 8074 sales@coilcraft.com.cn

Singapore + 65-6484 8412 sales@coilcraft.com.sg

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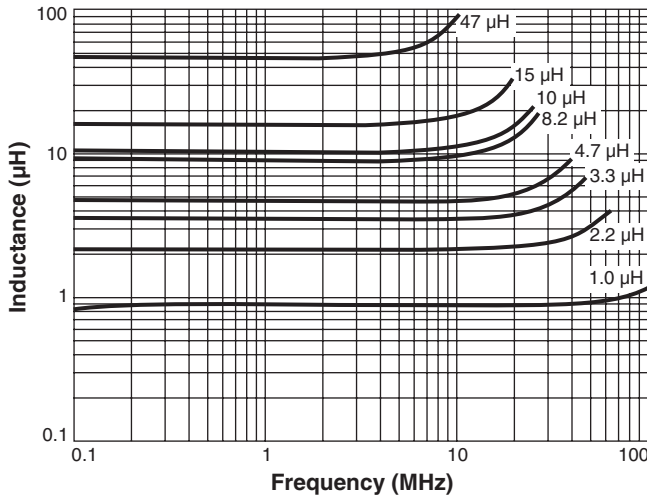
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

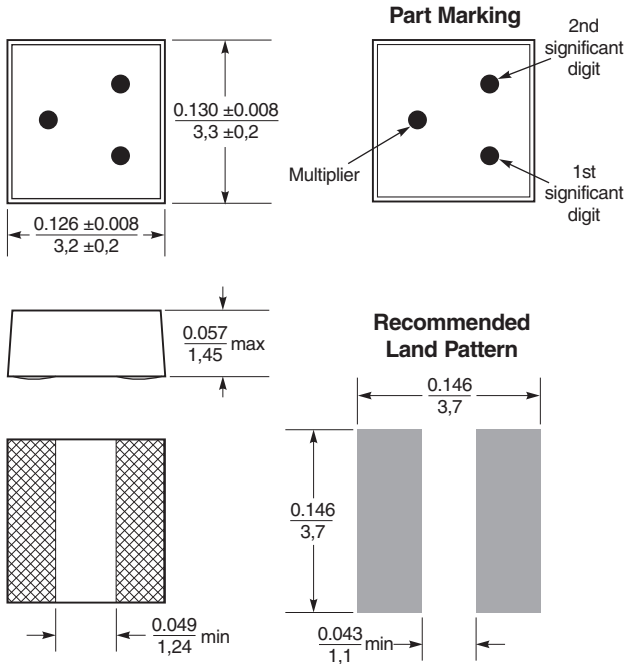
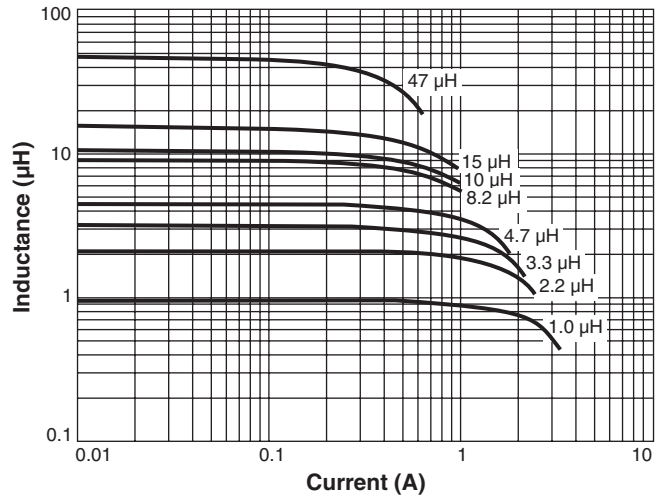


Shielded Power Inductors – EPL3314 Series

Typical L vs Frequency



Typical L vs Current



Part Marking (Parts manufactured prior to Oct. 20, 2009 may not be marked.)

Part number	Value	1st digit	2nd digit	Multiplier
EPL3314-102	1.0 µH	Brown	Black	Red
EPL3314-222	2.2 µH	Red	Red	Red
EPL3314-332	3.3 µH	Orange	Orange	Red
EPL3314-472	4.7 µH	Yellow	Violet	Red
EPL3314-822	8.2 µH	Gray	Red	Red
EPL3314-103	10 µH	Brown	Black	Orange
EPL3314-153	15 µH	Brown	Green	Orange
EPL3314-473	47 µH	Yellow	Violet	Orange

Note: All marked parts have three dots. Black dot, used only on -102 and -103 as second significant digit, may be very difficult to see.

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



US +1-847-639-6400 sales@coilcraft.com
UK +44-1236-730595 sales@coilcraft-europe.com
Taiwan +886-2-2264 3646 sales@coilcraft.com.tw
China +86-21-6218 8074 sales@coilcraft.com.cn
Singapore + 65-6484 8412 sales@coilcraft.com.sg