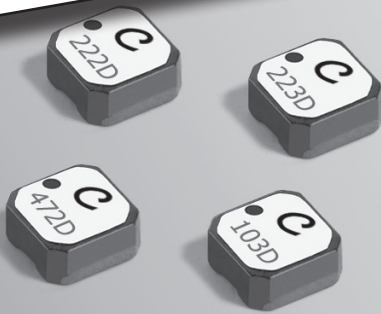


Shielded Power Inductors - LPS3314

Improved version now available.

These parts are not recommended for new designs. They are replaced by new lead free and halogen free versions which are identical in form, fit and function. See www.coilcraft.com/lps3314.cfm.



- Very low DCR; excellent current handling
- Miniature 3.3 × 3.3 mm footprint; less than 1.4 mm tall

Core material Ferrite

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

Terminations RoHS compliant silver-palladium-platinum-glass frit. Other terminations available at additional cost.

Weight 44.1 – 46.5 mg

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 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.52 mm pocket depth (Refer to dimensional drawing for part orientation in tape.)

Recommended pick and place nozzle OD: 3.3 mm; ID: ≤ 1.65 mm

PCB washing Tested with pure water or alcohol only. For other solvents, see Doc787_PCB_Washing.pdf.

Part number ¹	Inductance ² ±20% (µH)	DCR max ³ (Ohms)	SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁶	
				10% drop	20% drop	30% drop	20°C rise	40°C rise
LPS3314-102ML_	1.0	0.062	215	1.8	1.9	2.0	1.6	2.10
LPS3314-222ML_	2.2	0.100	140	1.3	1.4	1.5	1.2	1.60
LPS3314-332ML_	3.3	0.145	115	1.1	1.2	1.3	1.0	1.35
LPS3314-472ML_	4.7	0.175	86	0.97	0.99	1.0	0.90	1.25
LPS3314-562ML_	5.6	0.220	74	0.92	0.95	0.98	0.82	1.10
LPS3314-682ML_	6.8	0.240	72	0.87	0.90	0.91	0.82	1.10
LPS3314-822ML_	8.2	0.270	60	0.58	0.75	0.78	0.70	1.00
LPS3314-103ML_	10	0.330	55	0.56	0.66	0.70	0.65	0.87
LPS3314-153ML_	15	0.440	45	0.46	0.56	0.59	0.62	0.82
LPS3314-183ML_	18	0.575	37	0.44	0.51	0.54	0.52	0.68
LPS3314-223ML_	22	0.720	34	0.44	0.48	0.49	0.45	0.60
LPS3314-333ML_	33	0.920	27	0.30	0.38	0.40	0.43	0.58
LPS3314-473ML_	47	1.40	22	0.28	0.33	0.34	0.35	0.47
LPS3314-563ML_	56	1.55	19	0.26	0.30	0.31	0.32	0.42
LPS3314-683ML_	68	1.80	17	0.22	0.26	0.29	0.30	0.40
LPS3314-823ML_	82	2.00	14	0.20	0.24	0.26	0.29	0.39
LPS3314-104ML_	100	2.75	13	0.19	0.23	0.24	0.24	0.32
LPS3314-124ML_	120	3.45	11	0.19	0.21	0.22	0.22	0.30
LPS3314-154ML_	150	4.10	10	0.16	0.19	0.20	0.20	0.27
LPS3314-184ML_	180	4.80	9.0	0.14	0.17	0.18	0.19	0.25
LPS3314-224ML_	220	6.00	7.0	0.14	0.16	0.17	0.16	0.22
LPS3314-334ML_	330	9.30	6.0	0.11	0.12	0.13	0.13	0.18
LPS3314-474ML_	470	12.0	4.5	0.080	0.11	0.11	0.12	0.16
LPS3314-564ML_	560	14.0	4.5	0.095	0.105	0.11	0.11	0.145
LPS3314-684ML_	680	18.5	4.0	0.092	0.100	0.105	0.095	0.125
LPS3314-824ML_	820	24.0	3.7	0.086	0.099	0.100	0.085	0.110
LPS3314-105ML_	1000	31.0	3.0	0.090	0.099	0.100	0.082	0.100
LPS3314-155ML_	1500	44.0	2.7	0.080	0.086	0.090	0.060	0.080

1. Please, specify **termination** and **packaging** codes:

LPS3314-105MLC

Termination: L = RoHS compliant silver-palladium-platinum-glass frit. Special order:
T = RoHS tin-silver-copper (95.5/4/0.5)
or S = non-RoHS tin-lead (63/37).

Packaging: C = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 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 (3500 parts per full reel).

2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Ad using an Agilent/HP 4192A impedance analyzer or equivalent. Inductance at 1 MHz is the same for parts with SRF ≥ 10 MHz.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 8753ES or equivalent.
5. DC current that causes the specified inductance drop 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.

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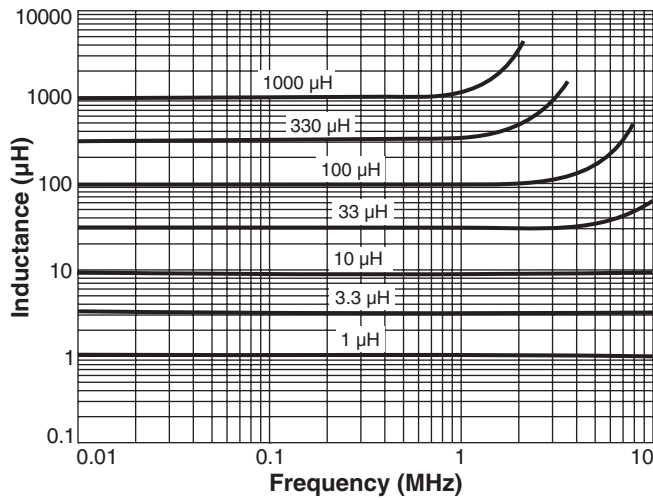
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This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

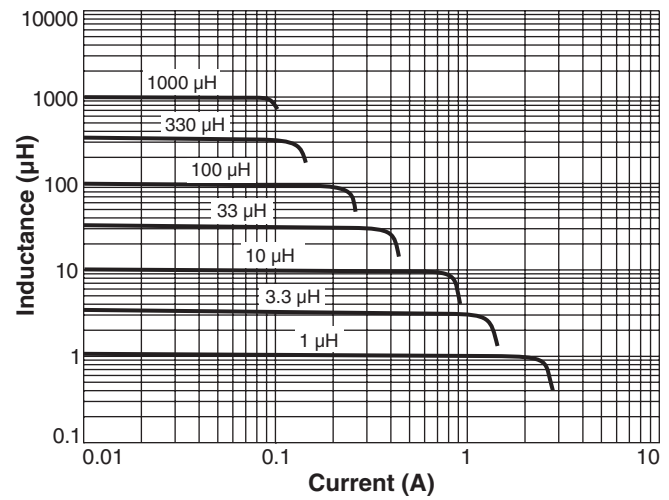


Shielded Power Inductors – LPS3314 Series

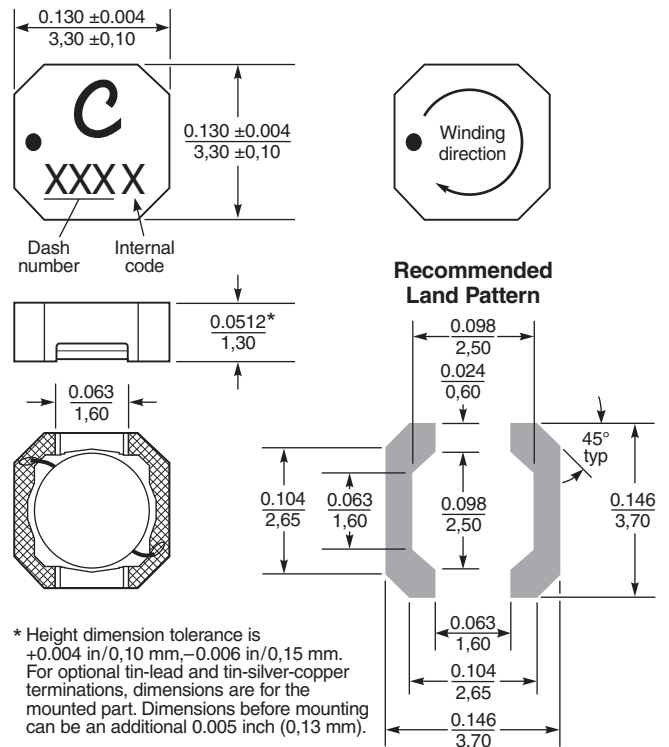
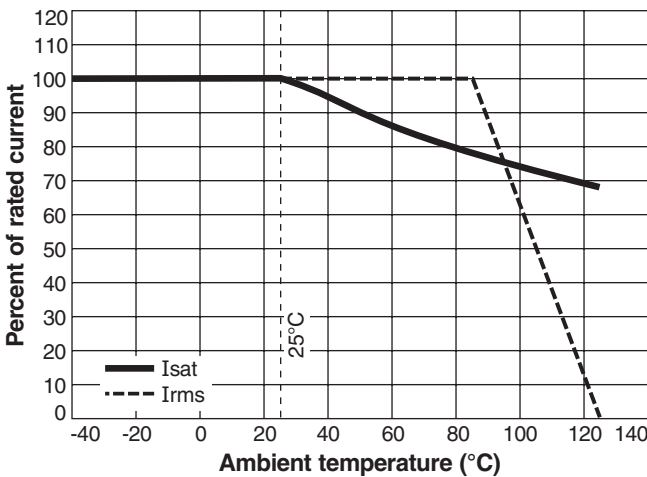
Typical L vs Frequency



Typical L vs Current



Current Derating

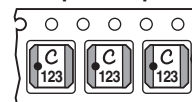


* Height dimension tolerance is +0.004 in/0,10 mm, -0.006 in/0,15 mm. For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch (0,13 mm).

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

Packaging 1000/7" reel; 3500/13" reel Plastic tape: 12 mm wide, 0.3 mm thick, 8 mm pocket spacing, 1.52 mm pocket depth

Orientation of parts in packaging tape



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