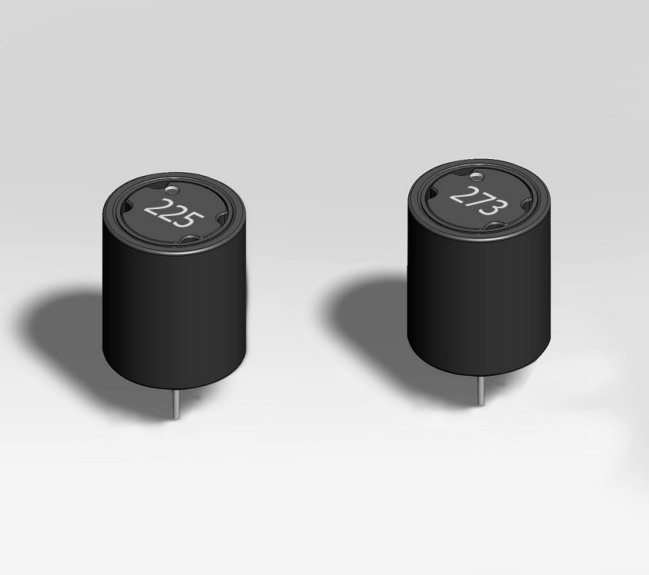
NEW!

Shielded Power Inductors – RFS1317



- Low cost, high current power inductors
- 27 µH to 10 mH inductance range
- 500 V isolation from winding to core.

Core material Ferrite

Terminations Tin-silver over tin over copper over steel. Other terminations available at additional cost.

Weight 9.1 – 9.4 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 +85°C. Tray packaging: –40°C to +80°C

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 144 parts per tray

PCB washing Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±10%	DCR max (Ohms)	SRF typ[3] (MHz)	Isat (A)[4] 10% drop	20% drop	30% drop	Irms (A)[5] 20°C rise	40°C rise
RFS1317-273KL	27 µH	0.033	20.95	5.2	6.4	7.2	4.10	5.70
RFS1317-333KL	33 µH	0.050	18.18	4.5	5.7	6.4	3.55	4.85
RFS1317-473KL	47 µH	0.055	12.93	3.9	4.7	5.4	3.20	4.50
RFS1317-683KL	68 µH	0.068	6.49	3.1	3.8	4.3	3.00	4.05
RFS1317-823KL	82 µH	0.071	5.03	2.8	3.6	4.0	2.75	3.90
RFS1317-104KL	100 µH	0.079	3.45	2.6	3.2	3.6	2.65	3.65
RFS1317-124KL	120 µH	0.110	3.18	2.4	2.9	3.2	2.20	3.15
RFS1317-154KL	150 µH	0.144	2.92	2.2	2.6	2.9	2.05	2.90
RFS1317-184KL	180 µH	0.172	2.27	1.9	2.4	2.7	1.85	2.65
RFS1317-224KL	220 µH	0.239	2.03	1.7	2.1	2.4	1.50	2.05
RFS1317-274KL	270 µH	0.263	1.66	1.7	1.9	2.2	1.50	2.05
RFS1317-334KL	330 µH	0.286	1.55	1.5	1.7	2.0	1.40	1.90
RFS1317-394KL	390 µH	0.317	1.39	1.3	1.6	1.8	1.35	1.85
RFS1317-474KL	470 µH	0.409	1.20	1.3	1.4	1.6	1.10	1.60
RFS1317-564KL	560 µH	0.524	1.12	1.1	1.3	1.5	0.95	1.35
RFS1317-684KL	680 µH	0.617	0.955	1.0	1.2	1.4	0.86	1.20
RFS1317-824KL	820 µH	0.834	0.827	0.89	1.0	1.2	0.75	1.04
RFS1317-105KL	1.0 mH	1.02	0.725	0.83	1.0	1.1	0.68	0.97
RFS1317-125KL	1.2 mH	1.19	0.647	0.72	0.94	1.0	0.60	0.81
RFS1317-155KL	1.5 mH	1.36	0.599	0.66	0.82	0.91	0.59	0.78
RFS1317-185KL	1.8 mH	1.49	0.566	0.60	0.78	0.87	0.54	0.74
RFS1317-225KL	2.2 mH	2.01	0.496	0.56	0.69	0.77	0.45	0.62
RFS1317-275KL	2.7 mH	2.22	0.439	0.51	0.62	0.70	0.43	0.61
RFS1317-335KL	3.3 mH	2.38	0.435	0.46	0.61	0.68	0.41	0.57
RFS1317-395KL	3.9 mH	3.38	0.373	0.41	0.51	0.57	0.34	0.49
RFS1317-475KL	4.7 mH	3.68	0.352	0.38	0.48	0.54	0.33	0.46
RFS1317-565KL	5.6 mH	4.03	0.320	0.34	0.44	0.49	0.32	0.46
RFS1317-685KL	6.8 mH	5.43	0.288	0.32	0.40	0.45	0.26	0.38
RFS1317-825KL	8.2 mH	5.88	0.274	0.31	0.39	0.44	0.25	0.35
RFS1317-106KL	10 mH	6.55	0.254	0.28	0.33	0.37	0.24	0.35

1. When ordering, please specify **termination** code:
   RFS1317-106L
   Termination: L = Tin-silver over tin over copper over steel.
   Special order: **T** = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).
2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
3. SRF measured using Agilent/HP 4191A or equivalent.
4. DC current that causes the specified inductance drop from its value without current..
5. Current that causes the specified temperature rise from 25°C ambient.
6. Electrical specifications at 25°C.

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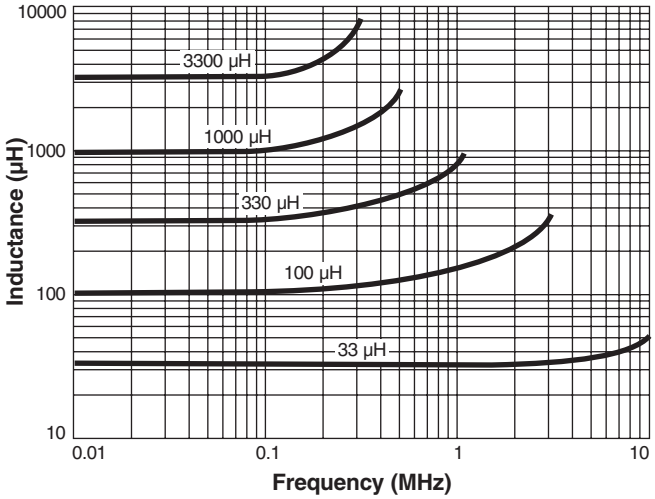
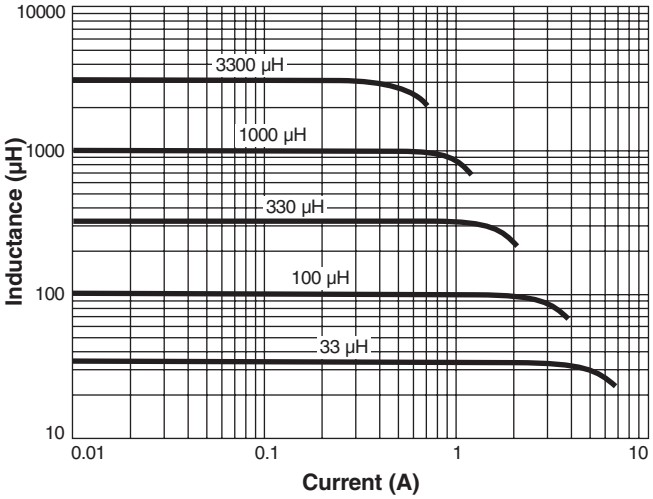
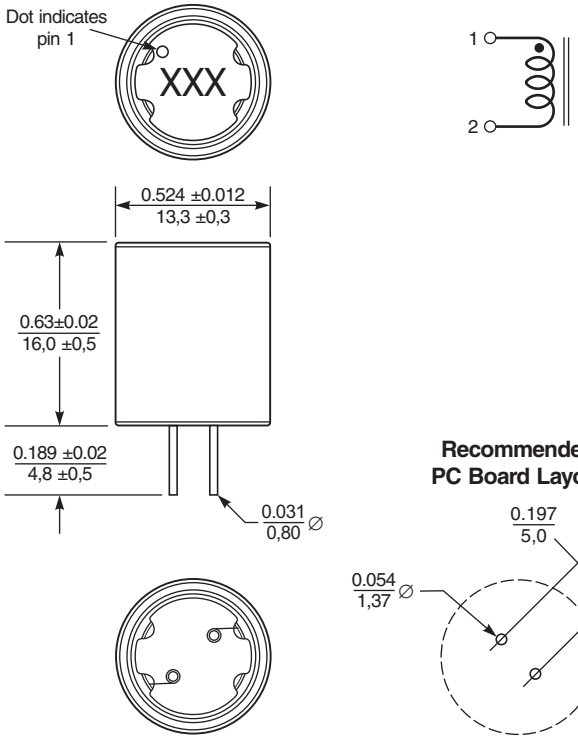
Shielded Power Inductors – RFS1317 Series

Typical L vs Current



Typical L vs Frequency





Recommended PC Board Layout

Dimensions are in inches / mm

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