

**NEW!**

# Shielded Power Inductors – RFS1113



- Low cost, high current power inductors
- 6.8  $\mu$ H to 2.7 mH inductance range

**Core material** Ferrite**Terminations** Tin-silver (96.5/3.5) over tin over copper over steel. Other terminations available at additional cost.**Weight** 4.1 – 4.7 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** 125 parts per tray**PCB washing** Tested with pure water or alcohol only. For other solvents, see Doc787\_PCB\_Washing.pdf.

Part number <sup>1</sup>	Inductance <sup>2</sup> $\pm 20\%$ ( $\mu$ H)	DCR (Ohms)		SRF typ <sup>3</sup> (MHz)	Isat (A) <sup>4</sup>			Irms (A) <sup>5</sup>	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
RFS1113-682ME	6.8	0.014	0.016	45.0	6.6	8.0	9.1	5.65	7.80
RFS1113-103ME	10	0.017	0.020	30.2	5.4	6.6	7.4	5.20	7.20
RFS1113-153ME	15	0.020	0.023	19.8	4.0	5.0	5.8	4.80	6.60
RFS1113-223ME	22	0.023	0.026	11.8	3.5	4.2	4.8	4.40	6.10
RFS1113-273ME	27	0.032	0.036	9.6	3.0	3.6	4.2	3.60	5.05
RFS1113-333ME	33	0.045	0.052	8.8	2.8	3.5	4.0	3.20	4.40
RFS1113-393ME	39	0.058	0.064	8.4	2.4	3.1	3.6	2.75	3.75
RFS1113-473ME	47	0.081	0.089	7.9	2.2	2.9	3.3	2.30	3.20
RFS1113-104ME	100	0.184	0.200	4.0	1.5	1.9	2.2	1.55	2.10
RFS1113-224ME	220	0.281	0.295	2.8	1.0	1.3	1.5	1.25	1.65
RFS1113-564ME	560	0.709	0.744	1.8	0.68	0.86	0.98	0.73	1.00
RFS1113-105ME	1000	1.80	1.89	1.3	0.51	0.63	0.73	0.46	0.60
RFS1113-275ME	2700	3.76	3.95	0.72	0.33	0.40	0.45	0.30	0.40

1. When ordering, please specify **termination** code:**RFS1113-105ME****Termination:** E = 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).

- Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc on an Agilent/HP 4284A LCR-meter or equivalent.
- SRF measured using Agilent/HP 4191A or equivalent.
- DC current that causes the specified inductance drop from its value without current..
- Current that causes the specified temperature rise from 25°C ambient.
- Electrical specifications at 25°C.



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

Document 1002-1 Revised 03/10/14

© Coilcraft Inc. 2014

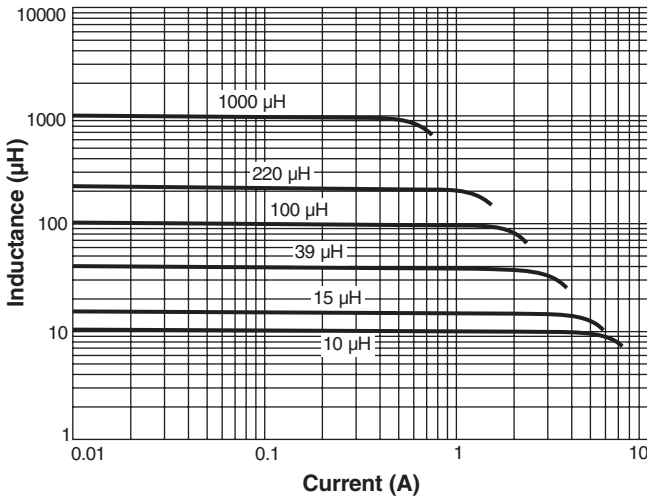
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

**NEW!**

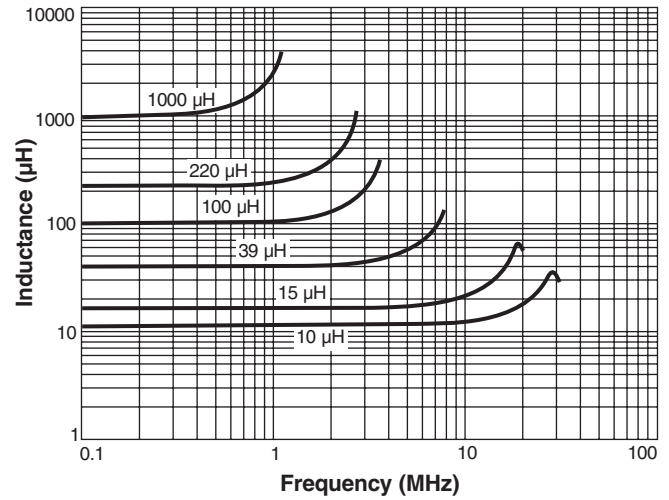
# Shielded Power Inductors – RFS1113 Series



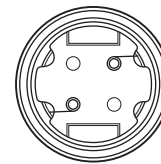
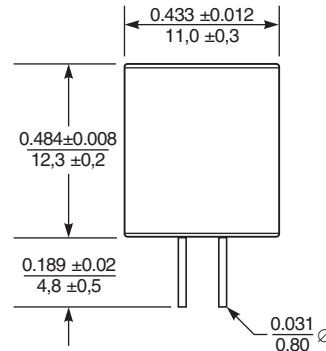
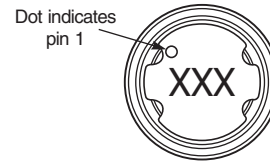
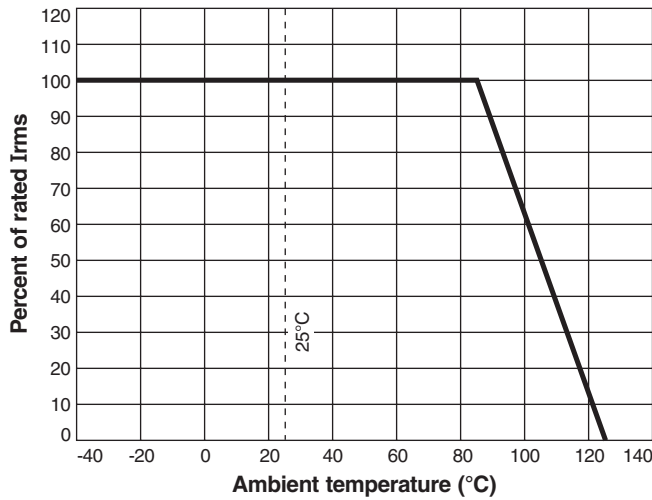
## Typical L vs Current



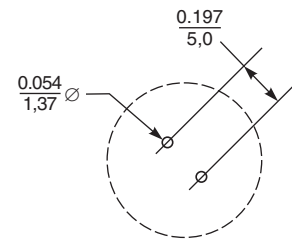
## Typical L vs Frequency



## Irms Derating



### Recommended PC Board Layout



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



**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

Document 1002-2 Revised 03/10/14  
 © Coilcraft Inc. 2014  
 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.