

NEW!

Shielded Power Inductors – RFS1412



- Low cost, high current power inductors
- 10 μ H to 10 mH inductance range; most at 10% tolerance

Core material Ferrite**Terminations** Tin-silver (96.5/3.5) over tin over copper over steel. Other terminations available at additional cost.**Weight** 6.0 – 7.0 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 ¹	Inductance ² (μ H)	DCR (Ohms)		SRF typ ³ (MHz)	Isat (A) ⁴			Irms (A) ⁵	
		typ	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
RFS1412-103ME	10 \pm 20%	0.016	0.018	36	6.2	7.4	8.1	5.80	7.90
RFS1412-153LE	15 \pm 15%	0.019	0.022	21	5.0	6.1	6.8	5.05	6.90
RFS1412-223KE	22 \pm 10%	0.029	0.032	13	4.4	5.2	5.7	4.05	5.60
RFS1412-333KE	33 \pm 10%	0.043	0.047	8.7	3.4	4.1	4.6	3.25	4.50
RFS1412-393KE	39 \pm 10%	0.060	0.066	7.7	3.1	3.9	4.3	2.85	3.90
RFS1412-473KE	47 \pm 10%	0.066	0.072	6.7	3.0	3.5	3.9	2.65	3.65
RFS1412-104KE	100 \pm 10%	0.083	0.091	5.1	2.0	2.4	2.6	2.35	3.25
RFS1412-224KE	220 \pm 10%	0.190	0.200	3.3	1.3	1.6	1.8	1.55	2.35
RFS1412-564KE	560 \pm 10%	0.484	0.508	1.8	0.82	1.0	1.1	0.92	1.28
RFS1412-105KE	1000 \pm 10%	1.01	1.06	1.3	0.63	0.76	0.84	0.64	0.86
RFS1412-106KE	10000 \pm 10%	9.58	9.87	0.36	0.20	0.25	0.27	0.20	0.28

1. When ordering, please specify **termination** code:**RFS1412-105KE****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

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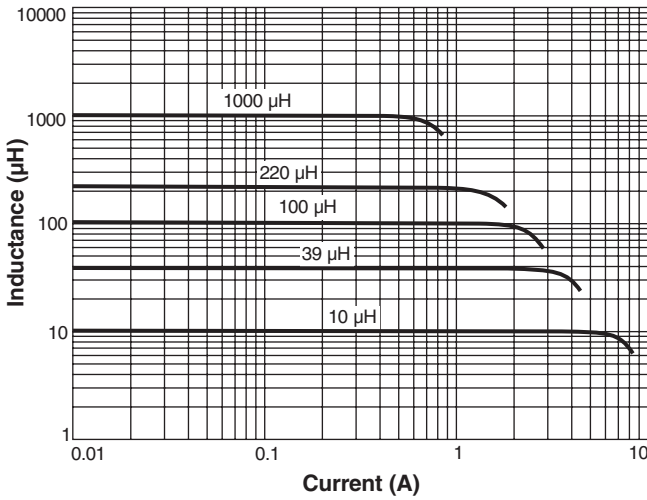
This product may not be used in medical or high risk applications without prior Coilcraft approval. Specification subject to change without notice. Please check web site for latest information.

NEW!

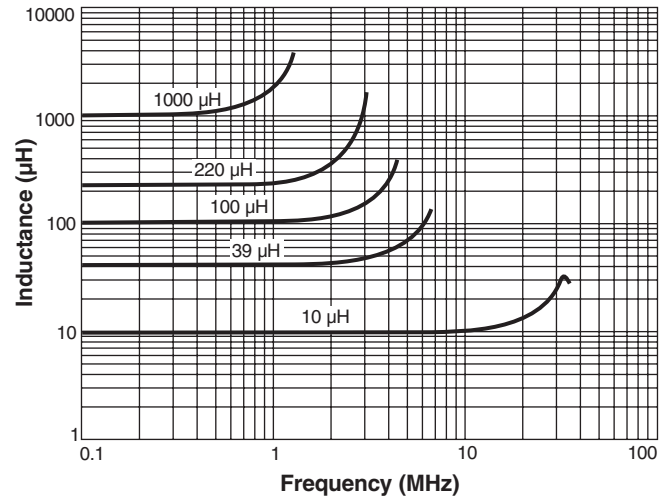
Shielded Power Inductors – RFS1412 Series



Typical L vs Current



Typical L vs Frequency



Irms Derating

