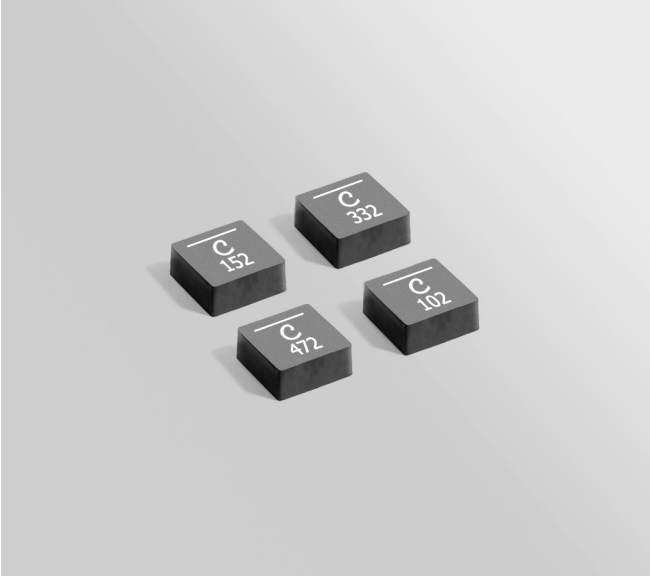
HIGH TEMPERATURE

Shielded Power Inductors – XFL4020

RoHS COMPLIANT

Halogen Free

AEC Q200 +125°C



- Exceptionally low DCR – 10.8 mOhm
- Excellent current handling capability

Designer's Kit C436 contains 5 each of all values
Environmental RoHS compliant, halogen free
Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.
Core material Composite
Core and winding loss See www.coilcraft.com/coreloss
Weight 162 – 169 mg
Ambient temperature –40°C to +125°C with Irms current, +125°C to +165°C with derated current.
Storage temperature Component: –40°C to +165°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, 0.23 mm thick, 8 mm pocket spacing, 2.3 mm pocket depth
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 (mOhms)[3] typ	DCR (mOhms)[3] max	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[6] 20°C rise	Irms (A)[6] 40°C rise
XFL4020-102ME_	1.0	10.80	11.90	64	4.5	5.1	5.4	8.0	11.0
XFL4020-152ME_	1.5	14.40	15.80	59	4.1	4.4	4.6	6.7	9.1
XFL4020-222ME_	2.2	21.35	23.50	38	3.1	3.5	3.7	6.0	8.0
XFL4020-332ME_	3.3	34.80	38.30	33	2.7	2.8	2.9	3.9	5.2
XFL4020-472ME_	4.7	52.20	57.40	26	2.0	2.5	2.7	3.6	5.0

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

XFL4020-472MEC

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).

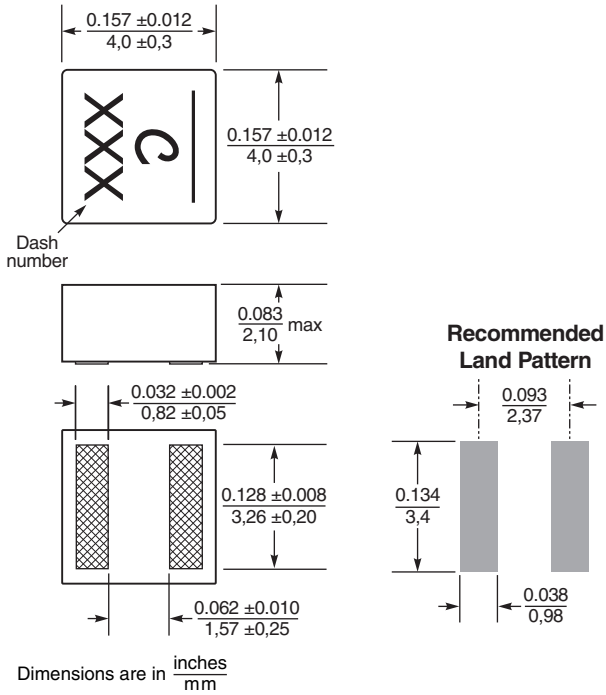
2. Inductance tested at 100 kHz, 0.1 Vrms, 0 Adc.
3. DCR measured on a micro-ohmmeter.
4. SRF measured using Agilent/HP 4395A or equivalent.
5. DC current at which the inductance drops the specified amount from its value without current.
6. Current that causes the specified temperature rise from 25°C ambient.
7. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

Irms Testing

Irms testing was performed on 0.75 inch wide × 0.25 inch thick copper traces in still air.

Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.



Coilcraft®
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

© 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.

HIGH TEMPERATURE

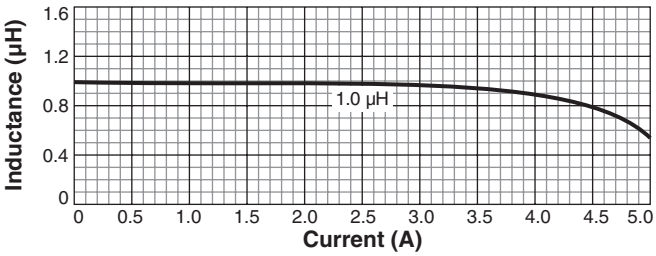
RoHS COMPLIANT

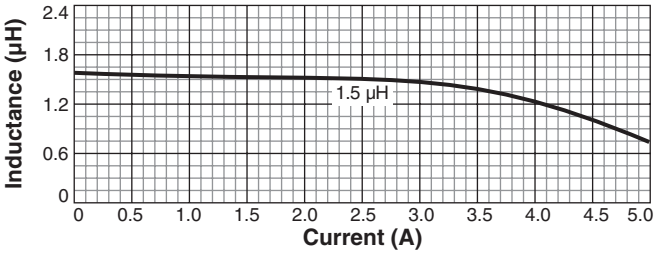
Halogen Free

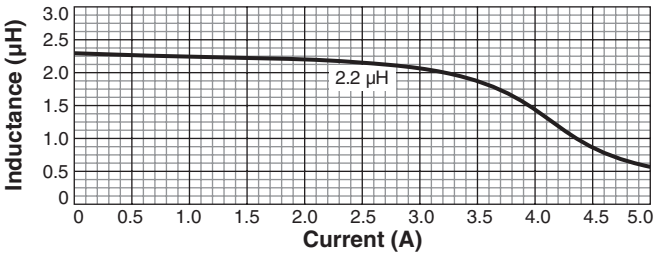
AEC Q200 +125°C

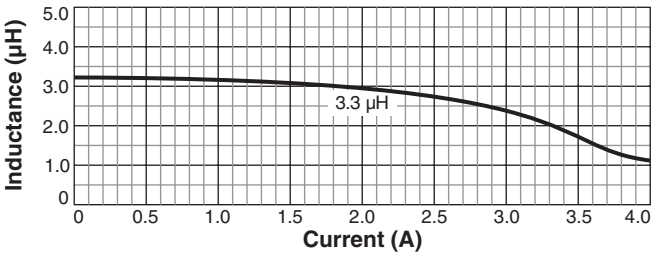
Shielded Power Inductors – XFL4020 Series

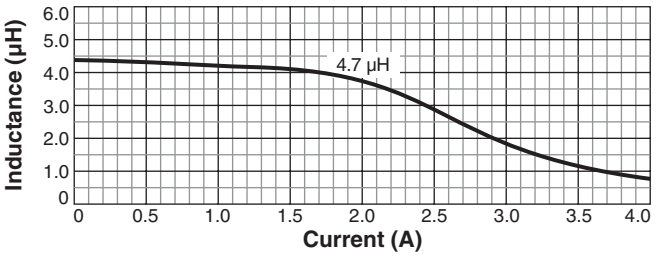
L vs Current



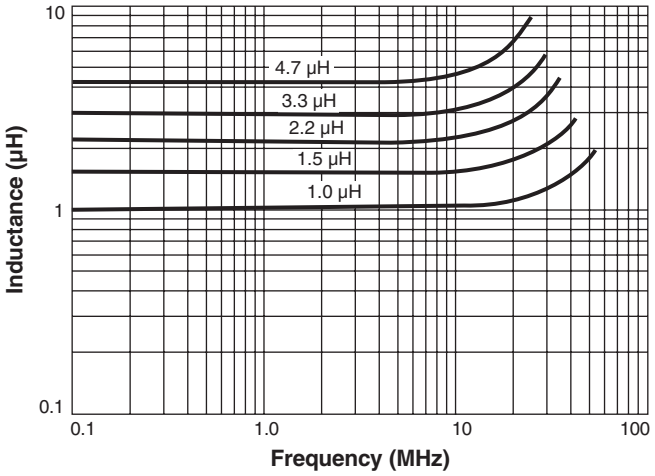




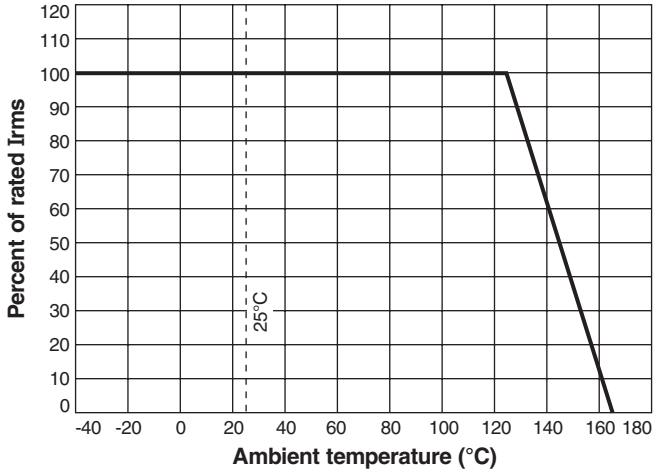




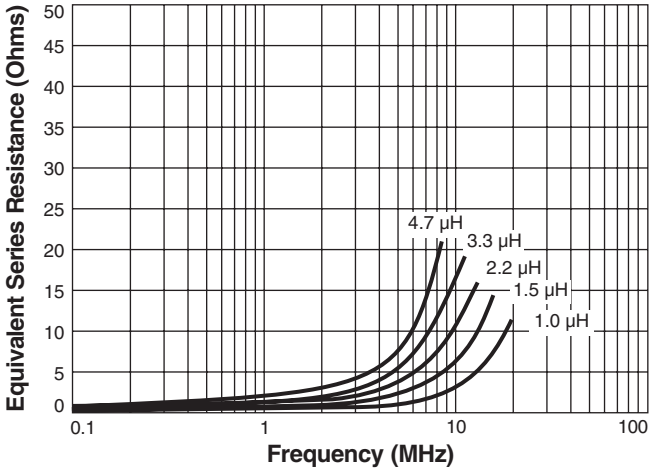
L vs Frequency



Irms Derating



ESR vs Frequency



Coilcraft®
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 745-2 Revised 07/18/12

© 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.