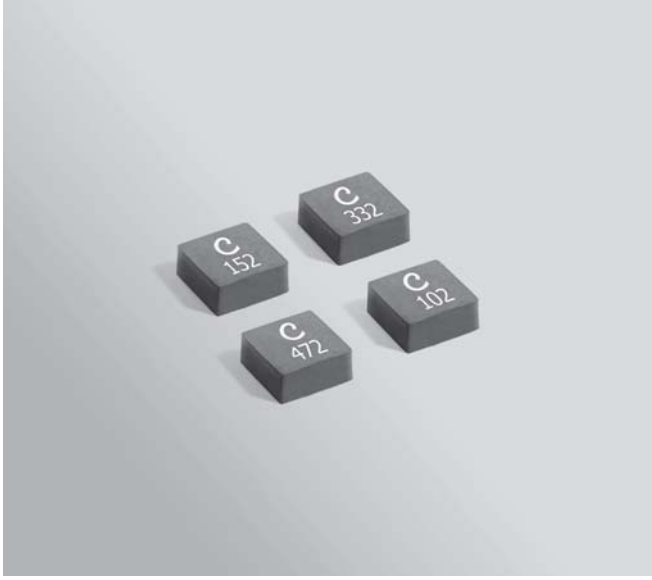
NEW!

Shielded Power Inductors – XFL4020



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

Designer's Kit C436 contains 5 each of all values

Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Weight 162 – 169 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. 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)

Mean Time Between Failures (MTBF) 26,315,789 hours

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 Only pure water or alcohol recommended

Part number[1]	Inductance[2] ±20% (µH)	DCR (mOhms) typ[3]	DCR (mOhms) max[3]	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:

   XFL4020-472ME C

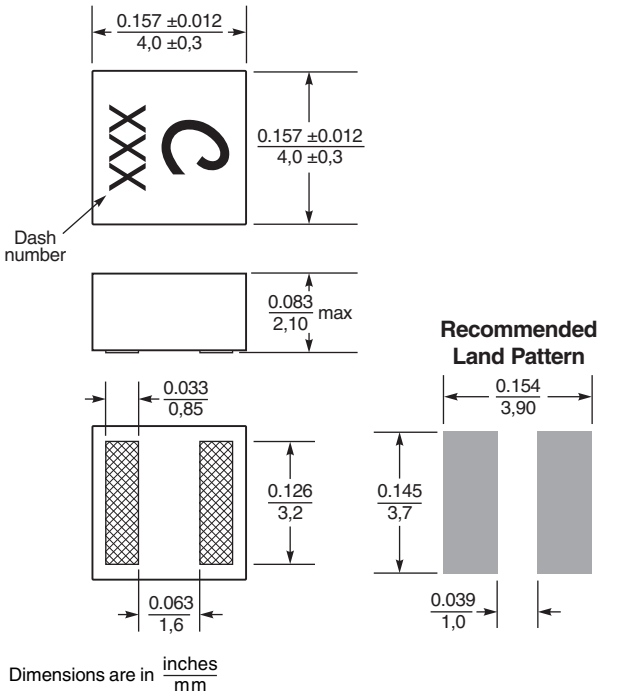
   Packaging: C = 7″ machine-ready reel. EIA-481 embossed plastic tape (1000 parts per full reel).
   B = Less than full reel. In tape, but not machine ready. To have a leader and trailer added ($25 charge), use code letter C instead.
   D = 13″ machine-ready reel. EIA-481 embossed plastic tape. Factory 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®

Specifications subject to change without notice.
Please check our website for latest information. Document 745-1 Revised 01/19/10

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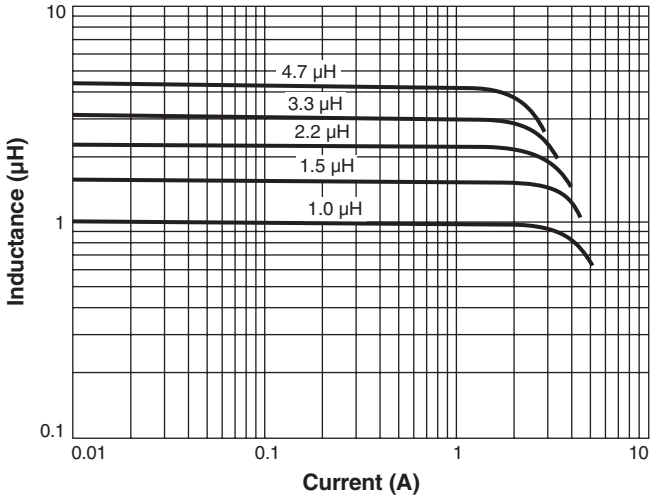
NEW!

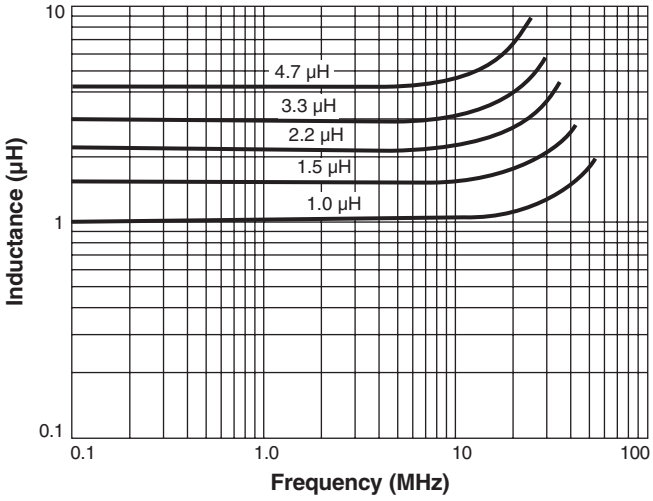
RoHS COMPLIANT

SMT Power Inductors – XFL4020 Series

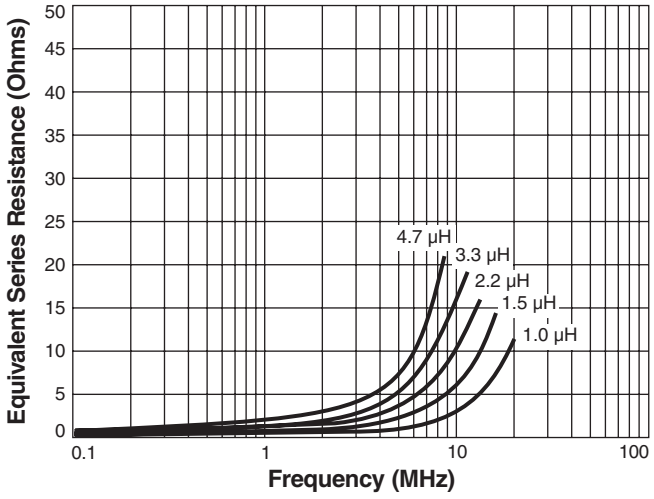
L vs Current



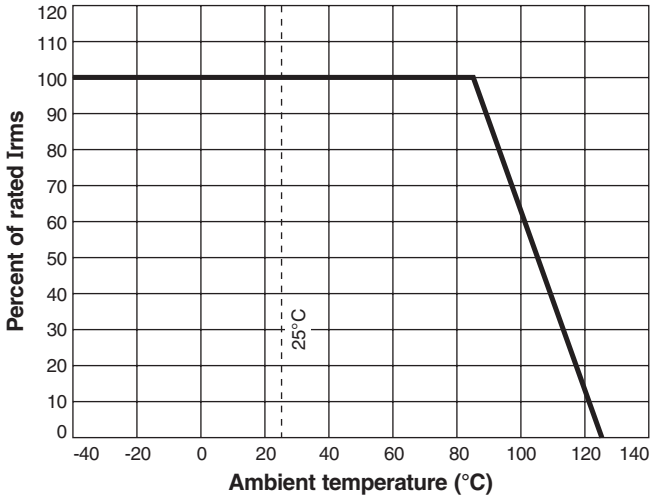
L vs Frequency



ESR vs Frequency



Irms Derating



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