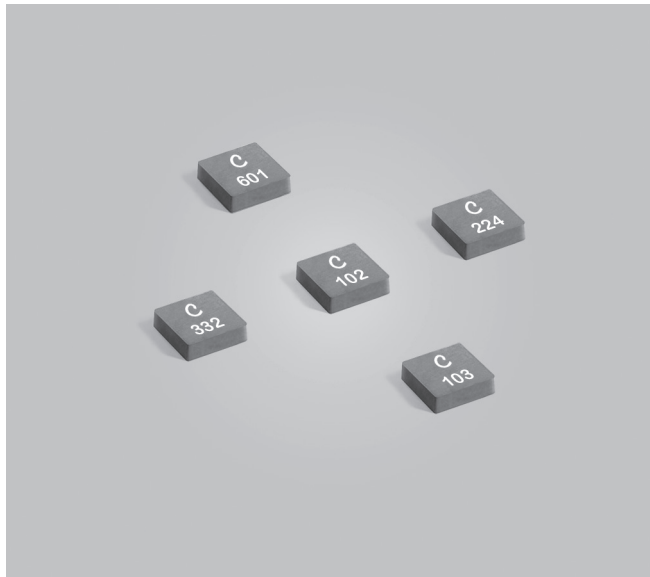




Shielded Power Inductors – XFL3010



- High current, magnetically shielded power inductors
- Only 1 mm high with a 3 mm × 3 mm footprint

Designer's Kit C440 contains 5 of each XFL3010 and XFL3012 value

Core material Composite

Environmental RoHS compliant, halogen free

Terminations RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum. Other terminations available at additional cost.

Weight 44 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.

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 2000/7" reel; 7500/13" reel Plastic tape: 8 mm wide, 0.23 mm thick, 4 mm pocket spacing, 1.14 mm pocket depth

PCB washing Only pure water or alcohol recommended

Part number ¹	Inductance ² ±20% (µH)	DCR (Ohms) ³		SRF typ ⁴ (MHz)	Isat (A) ⁵			Irms (A) ⁵	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
XFL3010-601ME_	0.60	0.030	0.033	180	1.8	2.4	2.7	1.8	2.5
XFL3010-102ME_	1.0	0.043	0.049	128	1.5	2.1	2.4	1.6	2.3
XFL3010-152ME_	1.5	0.071	0.080	97	1.2	1.6	1.9	1.4	1.9
XFL3010-222ME_	2.2	0.111	0.122	78	0.94	1.2	1.5	1.0	1.3
XFL3010-332ME_	3.3	0.154	0.166	64	0.86	1.1	1.3	0.88	1.2
XFL3010-472ME_	4.7	0.217	0.230	57	0.71	0.97	1.1	0.84	1.1
XFL3010-682ME_	6.8	0.315	0.346	42	0.56	0.78	0.92	0.72	0.95
XFL3010-103ME_	10	0.472	0.519	35	0.44	0.61	0.71	0.62	0.82
XFL3010-104ME_	100	4.64	5.50	10.1	0.13	0.19	0.22	0.20	0.29
XFL3010-224ME_	220	9.91	12.0	6.9	0.08	0.12	0.14	0.14	0.19

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

XFL3010-222MEC

Packaging: **C** = 7" machine-ready reel. EIA-481 embossed plastic tape (2000 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 (7500 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.



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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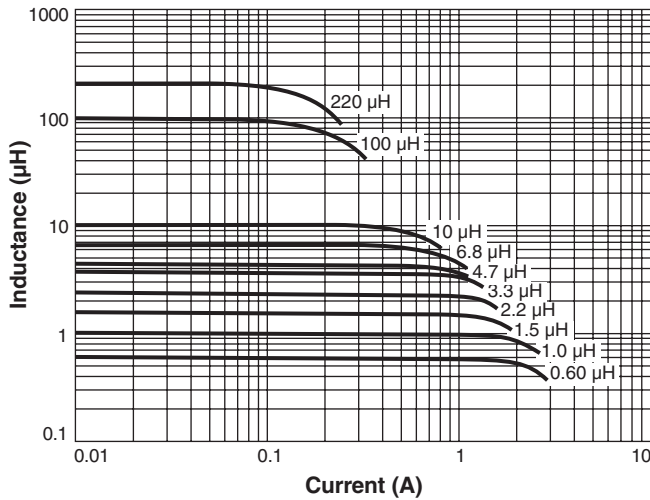
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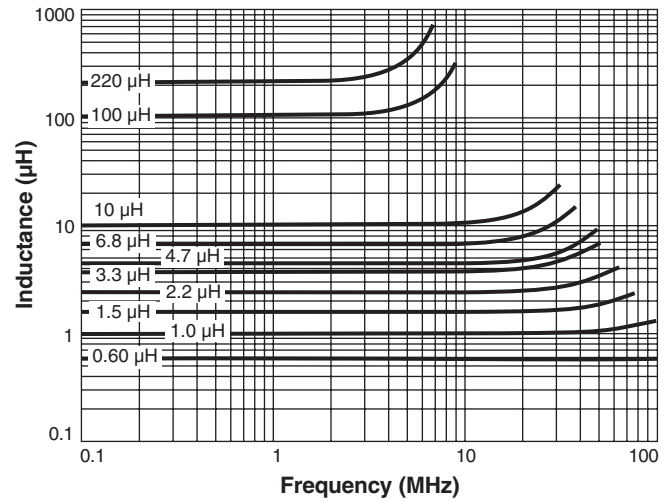


SMT Power Inductors – XFL3010

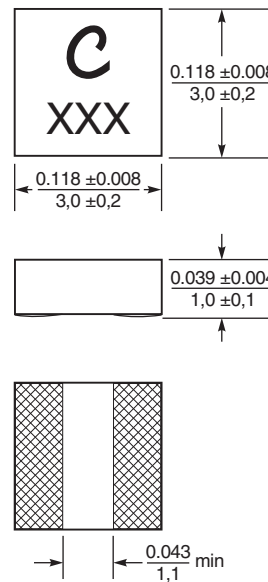
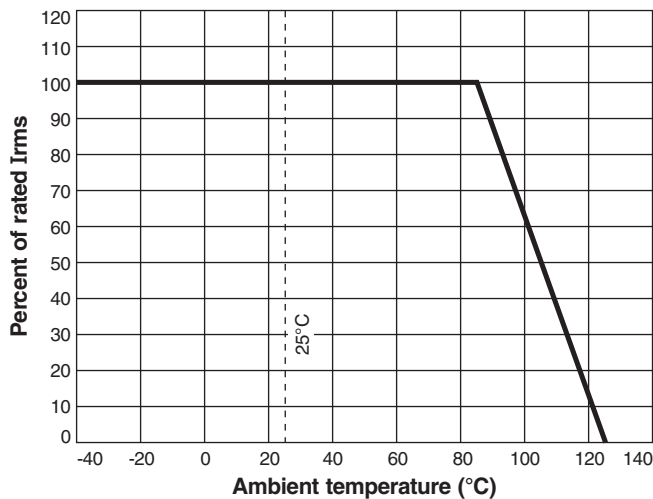
L vs Current



L vs Frequency

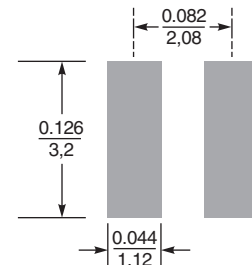


Typical Irms Derating



Parts manufactured prior to January 2011 may not have part marking.

Recommended Land Pattern



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