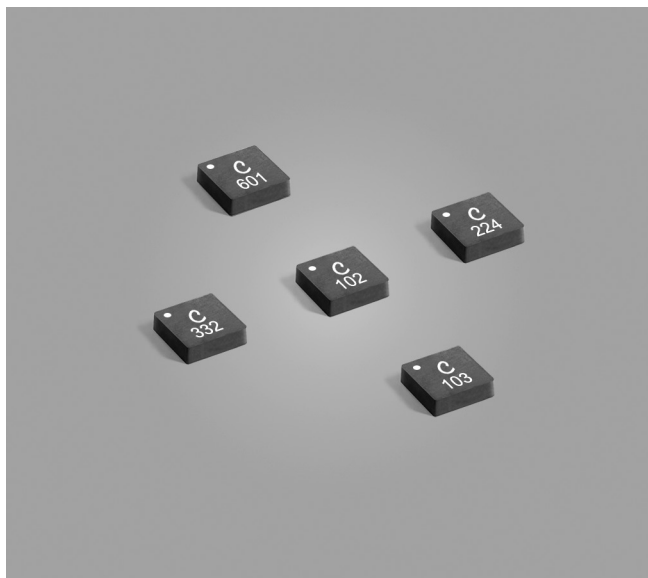


Shielded Power Inductors – XFL3010



- AEC-Q200 Grade 1 qualified (–40°C to +125°C ambient)
- 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 +125°C with (40°C rise) Irms current.

Maximum part temperature +165°C (ambient + temp rise). [Derating](#).

Storage temperature Component: –55°C to +165°C.

Tape and reel packaging: –55°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 Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See [Doc787_PCB_Washing.pdf](#).

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	97.0	1.2	1.6	1.9	1.4	1.9
XFL3010-222ME_	2.2	0.111	0.122	78.0	0.94	1.2	1.5	1.0	1.3
XFL3010-332ME_	3.3	0.154	0.166	64.0	0.86	1.1	1.3	0.88	1.2
XFL3010-472ME_	4.7	0.217	0.230	57.0	0.71	0.97	1.1	0.84	1.1
XFL3010-682ME_	6.8	0.315	0.346	42.0	0.56	0.78	0.92	0.72	0.95
XFL3010-103ME_	10	0.472	0.519	35.0	0.44	0.61	0.71	0.62	0.82
XFL3010-153ME_	15	0.521	0.560	28.4	0.33	0.45	0.53	0.56	0.76
XFL3010-223ME_	22	0.770	0.818	21.7	0.26	0.35	0.40	0.48	0.66
XFL3010-333ME_	33	1.12	1.20	17.5	0.22	0.30	0.35	0.41	0.56
XFL3010-393ME_	39	1.23	1.40	16.9	0.21	0.29	0.33	0.37	0.51
XFL3010-473ME_	47	1.71	1.93	14.4	0.16	0.23	0.27	0.33	0.44
XFL3010-563ME_	56	1.95	2.16	13.6	0.16	0.22	0.25	0.3	0.41
XFL3010-683ME_	68	2.32	2.60	12.7	0.15	0.21	0.24	0.27	0.36
XFL3010-823ME_	82	2.77	3.10	11.6	0.14	0.20	0.23	0.26	0.34
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 **termination** and **packaging** codes:

XFL3010-222MEC

Termination: **E** = RoHS compliant tin-silver-copper (96.5/3/0.5) over tin over nickel over silver-platinum.

Special order:

S = non-RoHS tin-lead (63/37).

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 1 MHz, 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 25°C that causes the specified inductance drop from its value without current. [Click for temperature derating information](#).

6. Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. [Click for temperature derating information](#).

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

Document 727-1 Revised 11/26/18

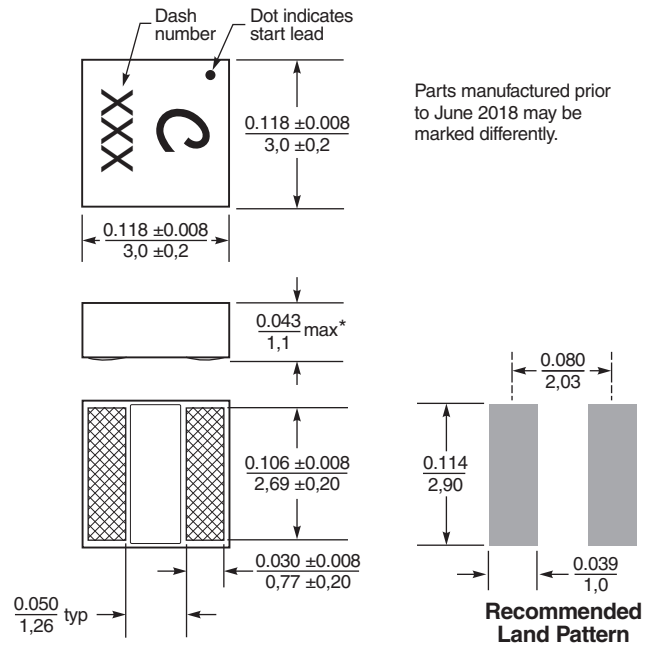
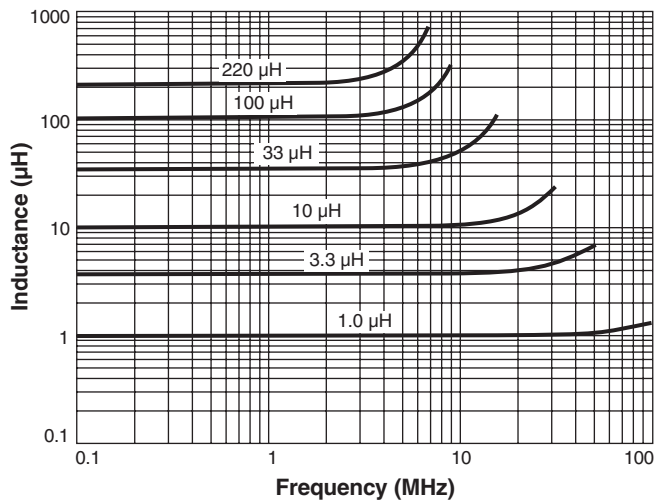
© Coilcraft Inc. 2018

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.



Shielded Power Inductors – XFL3010

Typical L vs Frequency



Parts manufactured prior to June 2018 may be marked differently.

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

* For optional tin-lead and tin-silver-copper terminations, dimensions are for the mounted part. Dimensions before mounting can be an additional 0.005 inch / 0.13 mm.



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 727-2 Revised 11/26/18

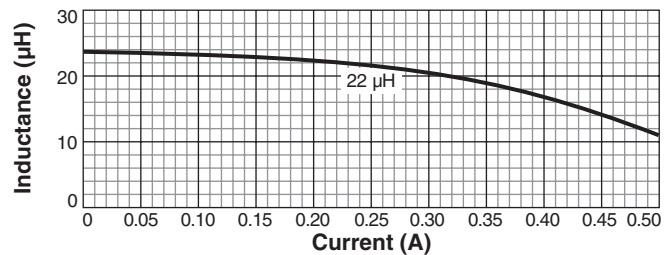
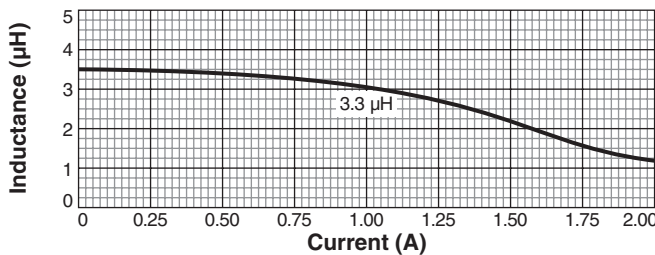
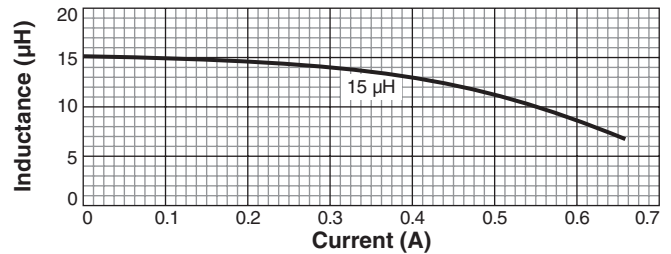
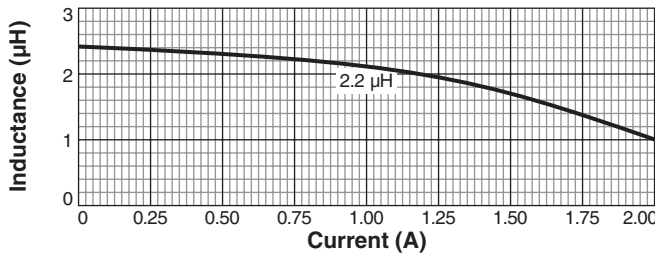
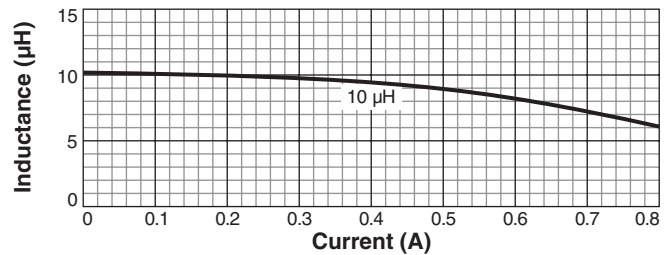
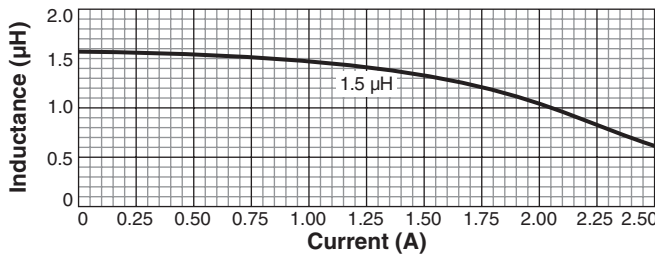
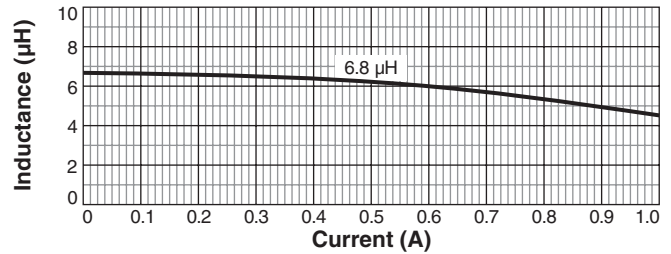
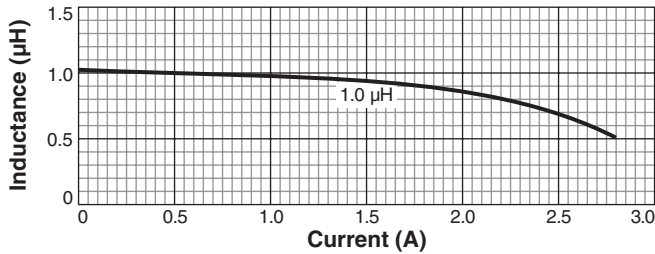
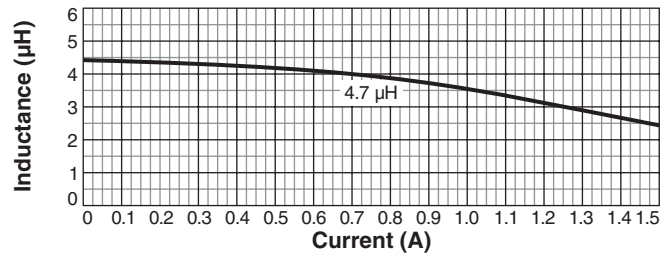
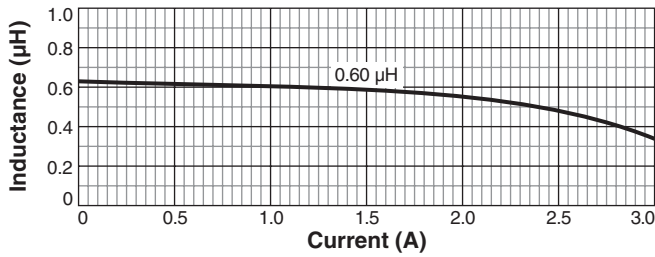
© Coilcraft Inc. 2018

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.



Shielded Power Inductors – XFL3010

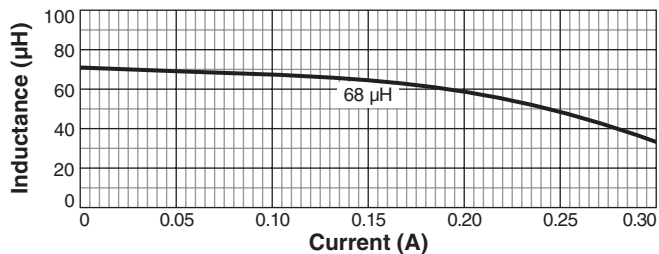
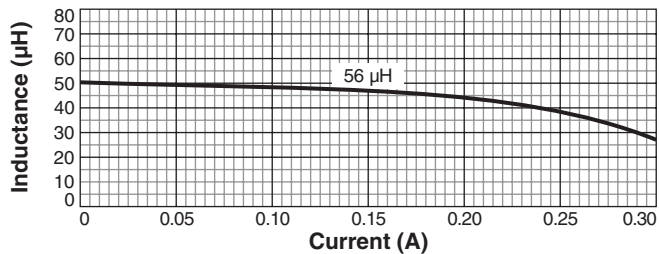
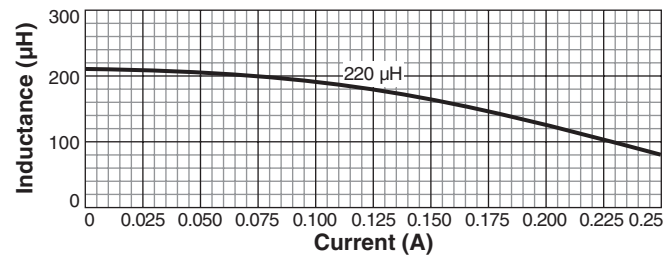
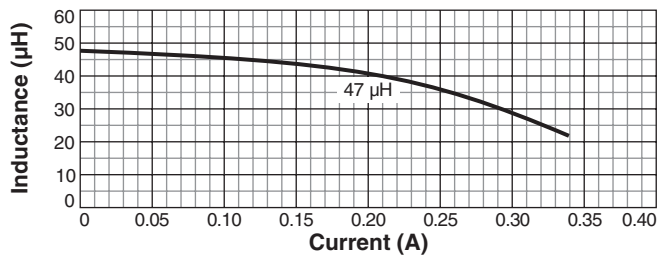
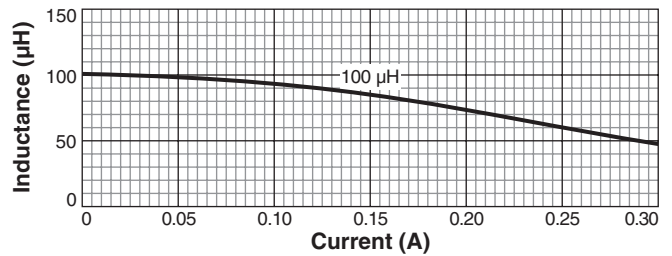
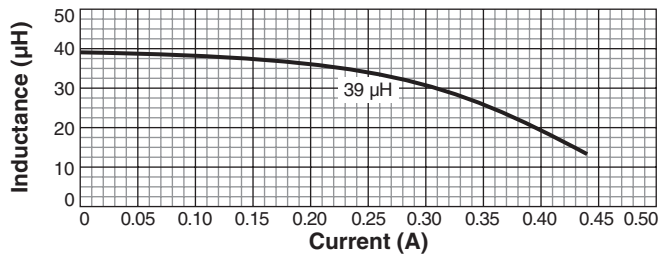
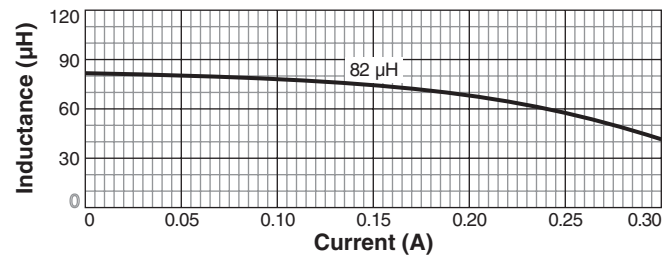
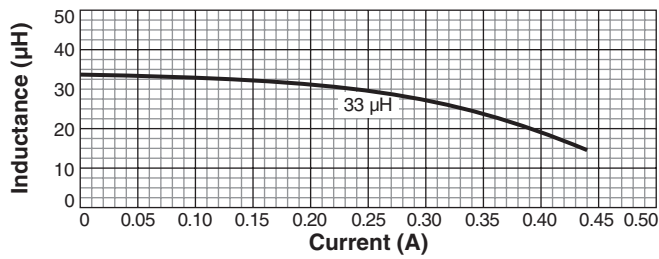
Typical L vs Current





Shielded Power Inductors – XFL3010

Typical L vs Current



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 727-4 Revised 11/26/18

© Coilcraft Inc. 2018

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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Coilcraft:

<u>XFL3010-332MEC</u>	<u>XFL3010-103MEC</u>	<u>XFL3010-601MEC</u>	<u>XFL3010-682MEC</u>	<u>XFL3010-473MEB</u>	<u>XFL3010-333MEB</u>
<u>XFL3010-683MEC</u>	<u>XFL3010-472MEC</u>	<u>XFL3010-393MEC</u>	<u>XFL3010-224MEB</u>	<u>XFL3010-563MEB</u>	<u>XFL3010-683MEB</u>
<u>XFL3010-104MEB</u>	<u>XFL3010-682MEB</u>	<u>XFL3010-223MEC</u>	<u>XFL3010-823MEB</u>	<u>XFL3010-333MEC</u>	<u>XFL3010-563MEC</u>
<u>XFL3010-393MEB</u>	<u>XFL3010-222MEB</u>	<u>XFL3010-104MEC</u>	<u>XFL3010-222MEC</u>	<u>XFL3010-153MEC</u>	<u>XFL3010-152MEC</u>
<u>XFL3010-472MEB</u>	<u>XFL3010-102MEB</u>	<u>XFL3010-152MEB</u>	<u>XFL3010-153MEB</u>	<u>XFL3010-601MEB</u>	<u>XFL3010-103MEB</u>
<u>XFL3010-332MEB</u>	<u>XFL3010-823MEC</u>	<u>XFL3010-224MEC</u>	<u>XFL3010-102MEC</u>	<u>XFL3010-473MEC</u>	<u>XFL3010-223MEB</u>