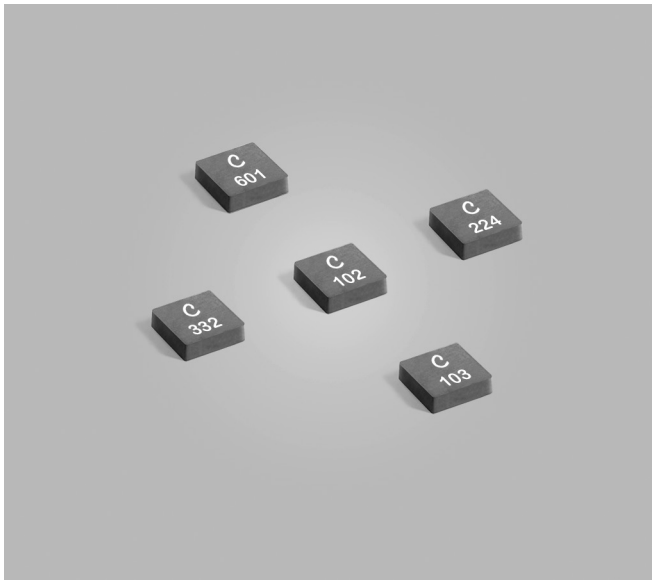
RoHS COMPLIANT

Halogen Free

AEC Q200 +125°C

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: –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 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] nom	DCR (Ohms)[3] max	SRF typ[4] (MHz)	Isat (A)[5] 10% drop	Isat (A)[5] 20% drop	Isat (A)[5] 30% drop	Irms (A)[5] 20°C rise	Irms (A)[5] 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.

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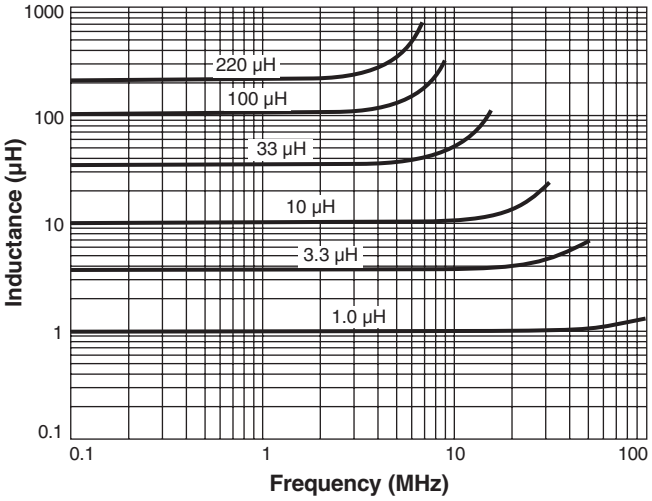
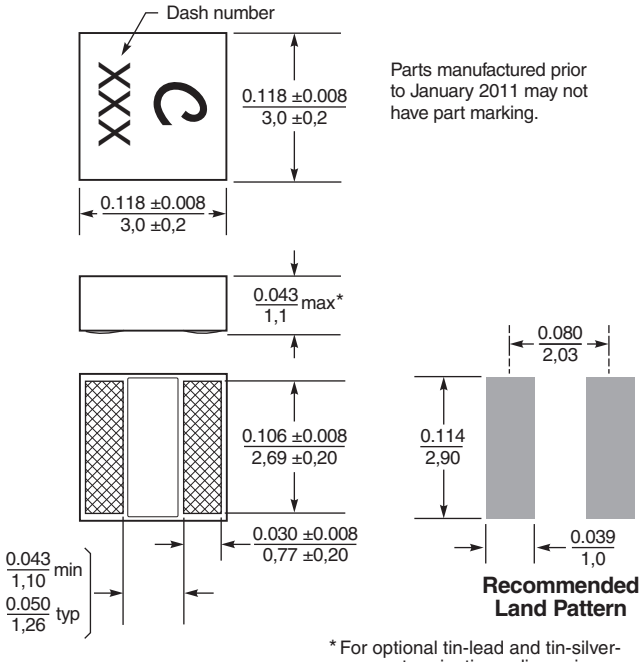
Typical L vs Frequency





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

Dimensions are in inches / 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.

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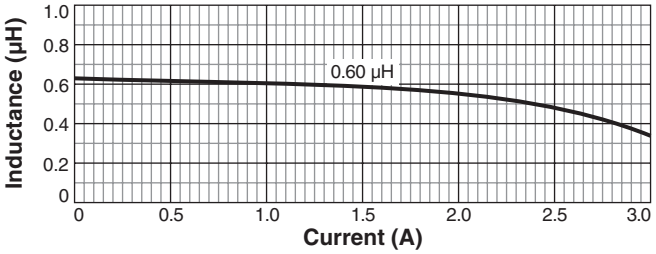
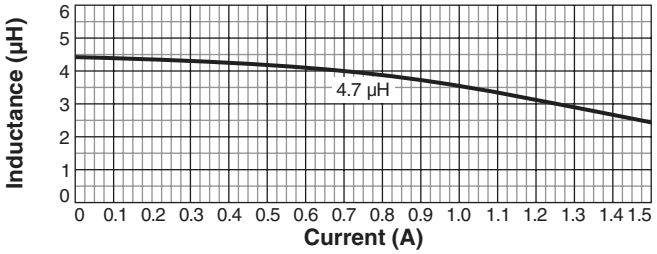
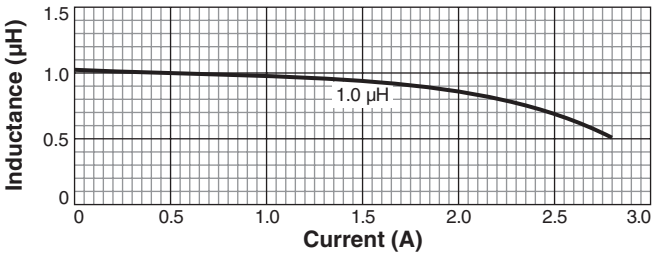
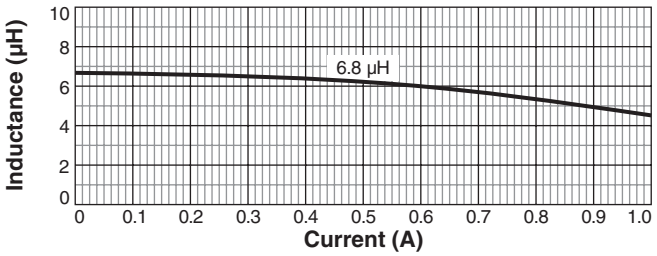
Shielded Power Inductors – XFL3010

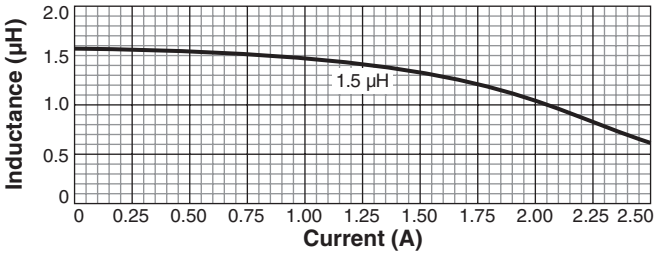
Typical L vs Current

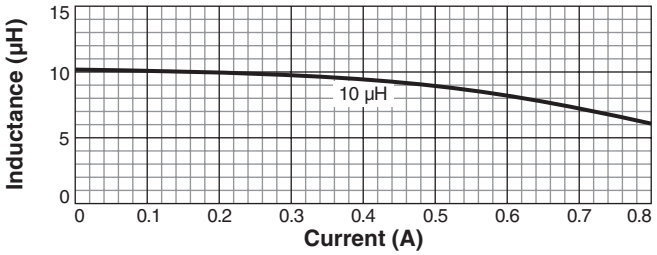


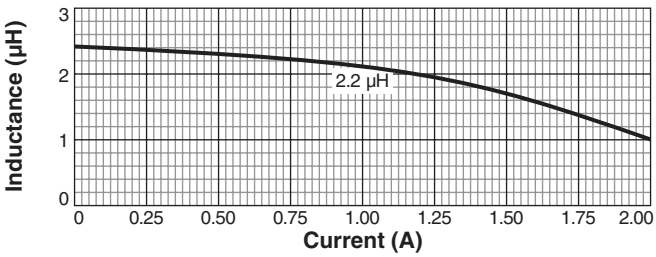


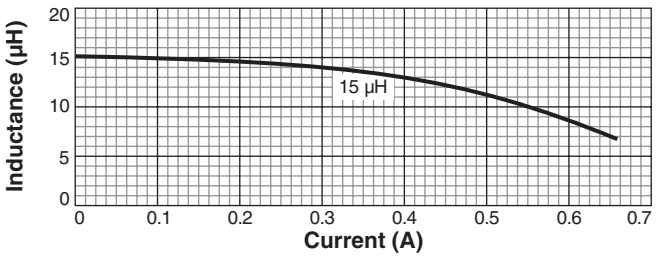


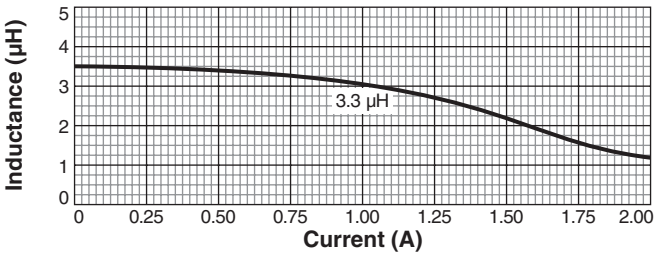


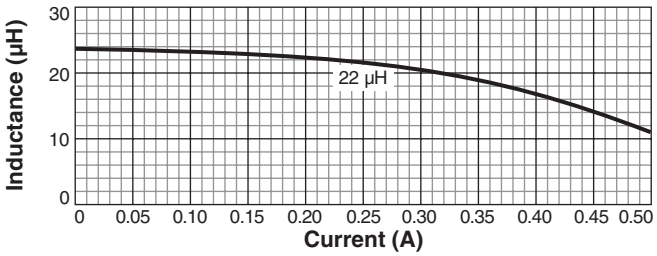












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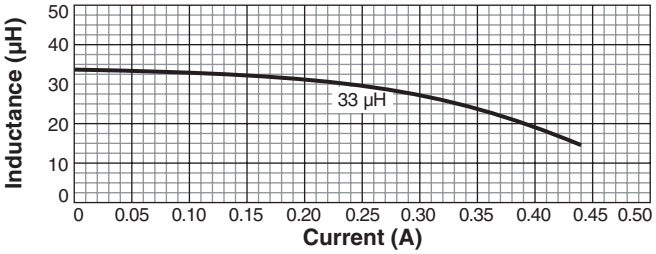

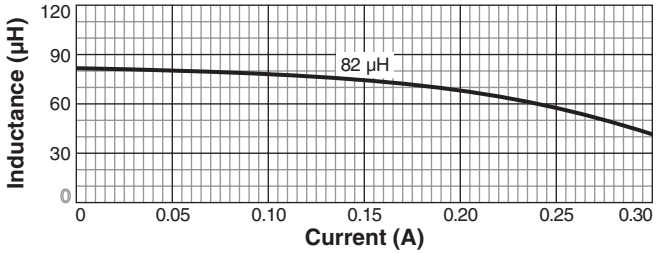

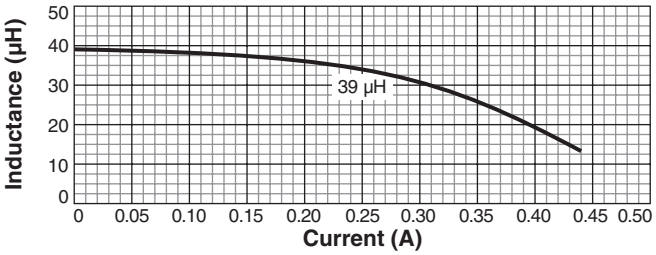

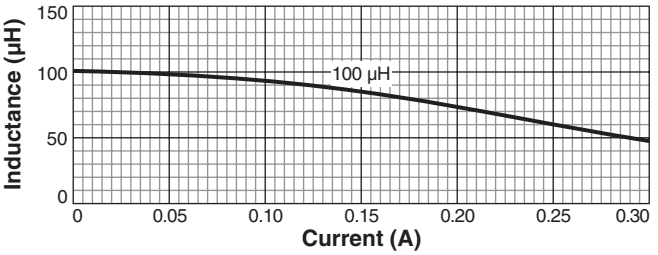

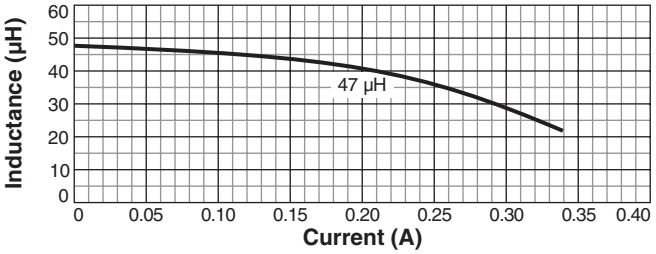

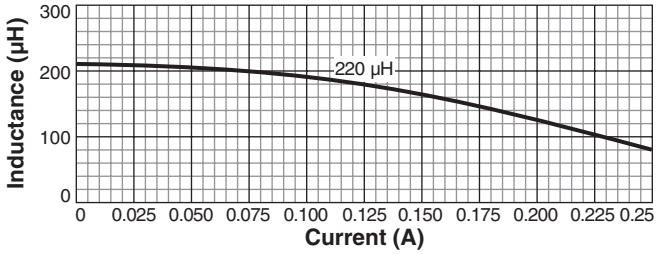

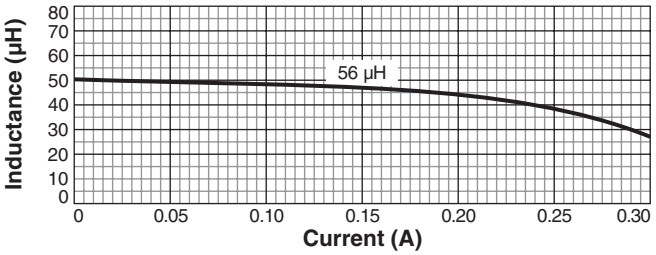

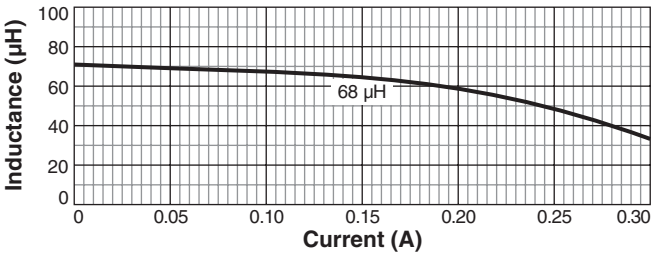

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