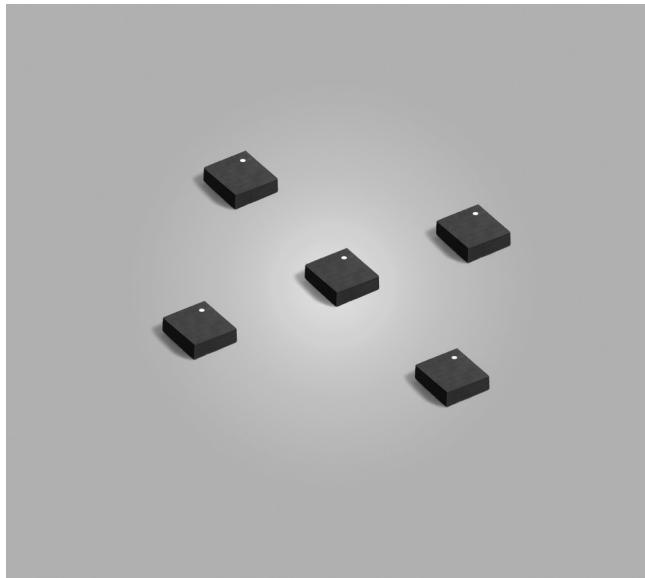




Shielded Power Inductors XFL2006



- Lowest profile, ultra-miniature, shielded power inductor
- Soft saturation makes them ideal for VRM/VRD applications.

Designer's Kit C478 contains 5 each of all values

Core material Composite

Core and winding loss See www.coilcraft.com/coreloss

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.

Weight 10 – 13 mg

Operating voltage 0 – 40 V

Ambient temperature -40°C to +85°C with (40°C rise) Irms current.

Maximum part temperature +125°C (ambient + temp rise). [Derating](#).

Storage temperature Component: -55°C to +125°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)

Packaging 2000/7" reel; 7500/13" reel Plastic tape: 8 mm wide, 0.28 mm thick, 4 mm pocket spacing, 0.76 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) ⁶	
		nom	max		10% drop	20% drop	30% drop	20°C rise	40°C rise
XFL2006-102ME_	1.0	0.153	0.169	170	0.71	1.0	1.2	0.910	1.22
XFL2006-222ME_	2.2	0.278	0.306	110	0.49	0.69	0.78	0.710	0.950
XFL2006-332ME_	3.3	0.460	0.506	88	0.42	0.56	0.66	0.550	0.720
XFL2006-472ME_	4.7	0.665	0.732	68	0.31	0.44	0.52	0.500	0.660
XFL2006-562ME_	5.6	0.75	0.825	61	0.30	0.43	0.50	0.460	0.600
XFL2006-682ME_	6.8	0.92	1.02	57	0.26	0.35	0.41	0.400	0.520
XFL2006-822ME_	8.2	1.08	1.19	51	0.24	0.33	0.39	0.370	0.490
XFL2006-103ME_	10.0	1.27	1.40	45	0.24	0.31	0.37	0.345	0.440
XFL2006-153ME_	15.0	2.02	2.22	37	0.19	0.25	0.29	0.265	0.350
XFL2006-223ME_	22.0	2.78	3.06	30.5	0.150	0.205	0.240	0.235	0.305
XFL2006-333ME_	33.0	4.45	4.90	24.0	0.110	0.150	0.180	0.160	0.205
XFL2006-473ME_	47.0	5.60	6.16	19.5	0.090	0.130	0.155	0.155	0.205
XFL2006-563ME_	56.0	6.65	7.32	16.5	0.085	0.120	0.145	0.145	0.195
XFL2006-683ME_	68.0	8.50	9.35	16.0	0.080	0.115	0.135	0.115	0.155
XFL2006-823ME_	82.0	9.25	10.18	13.5	0.065	0.090	0.115	0.125	0.165
XFL2006-104ME_	100.0	11.10	12.25	13.0	0.065	0.090	0.115	0.100	0.135

1. When ordering, please specify **termination** and **packaging** codes:

XFL2006-104MEC

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). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

B = Less than full reel. In an effort to simplify our part numbering system, Coilcraft is eliminating the need for multiple packaging codes. When ordering, simply change the last letter of your part number from B to C.

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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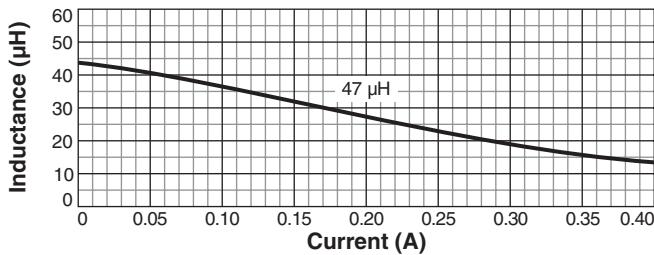
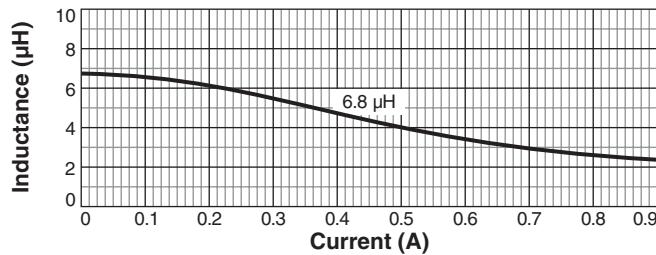
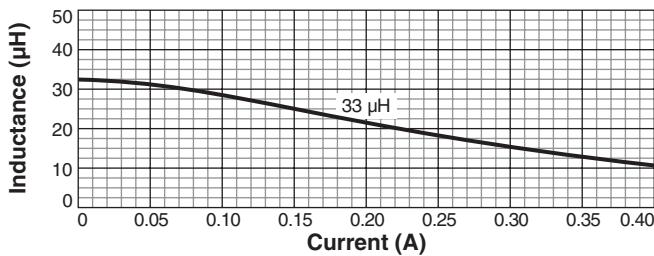
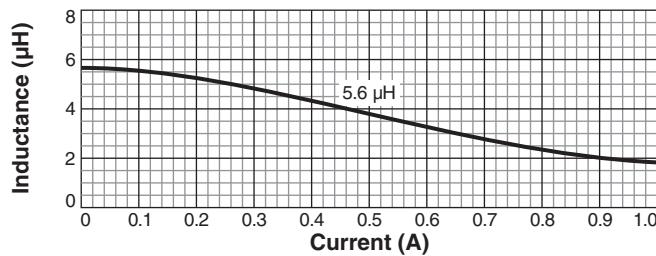
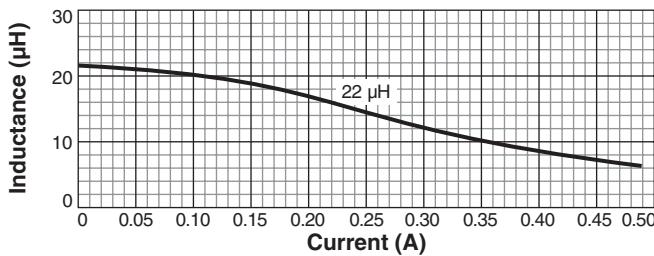
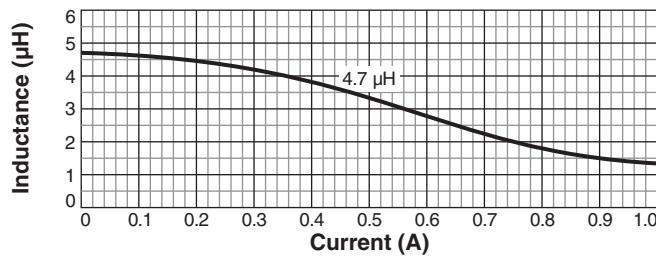
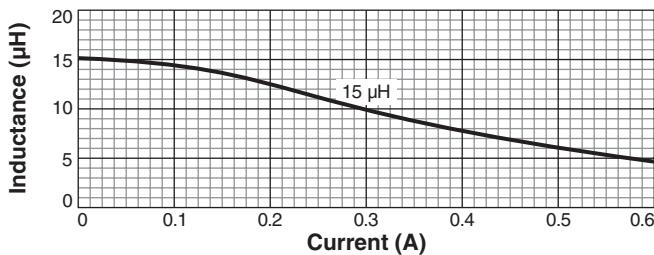
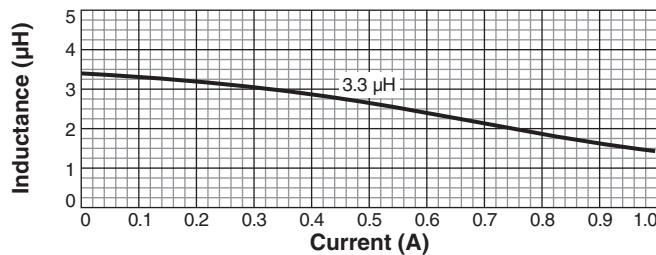
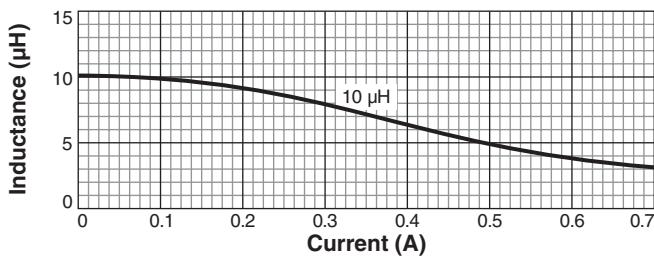
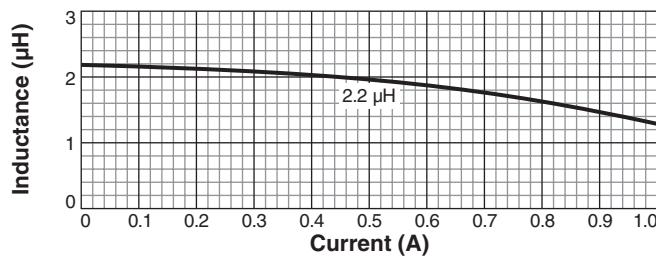
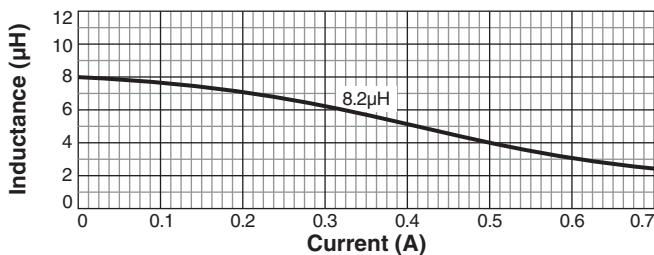
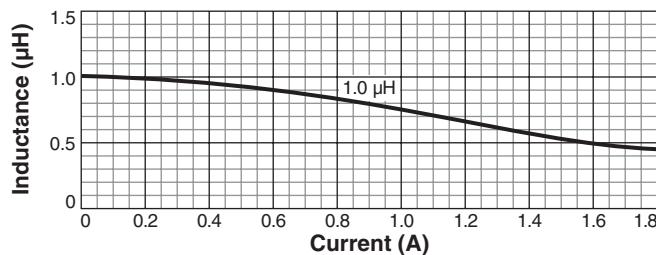
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XFL2006 Shielded Power Inductor Series

L vs Current



Coilcraft
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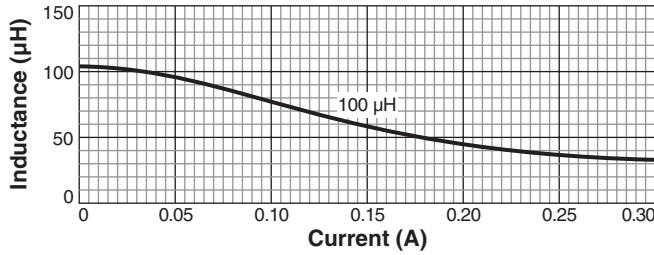
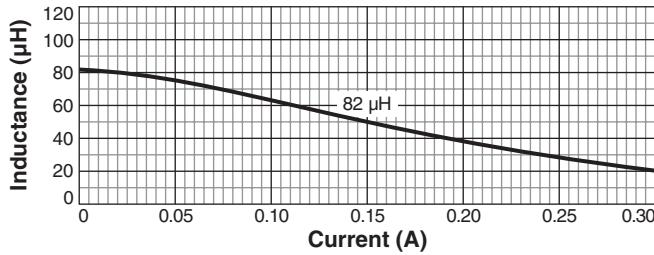
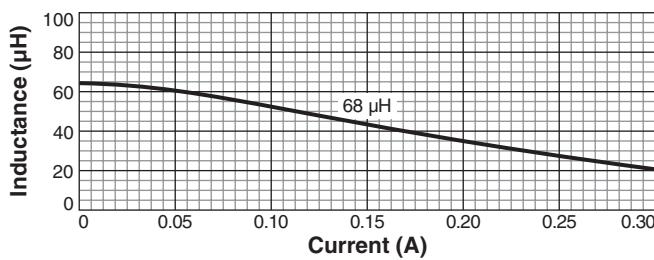
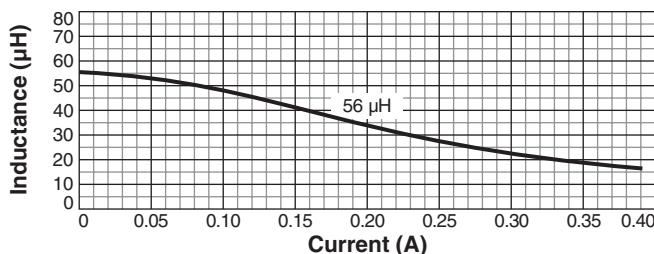
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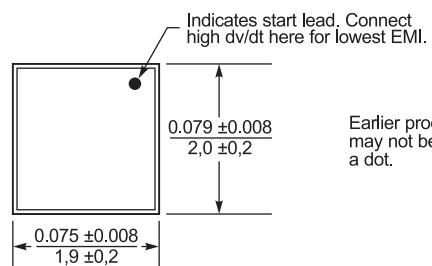
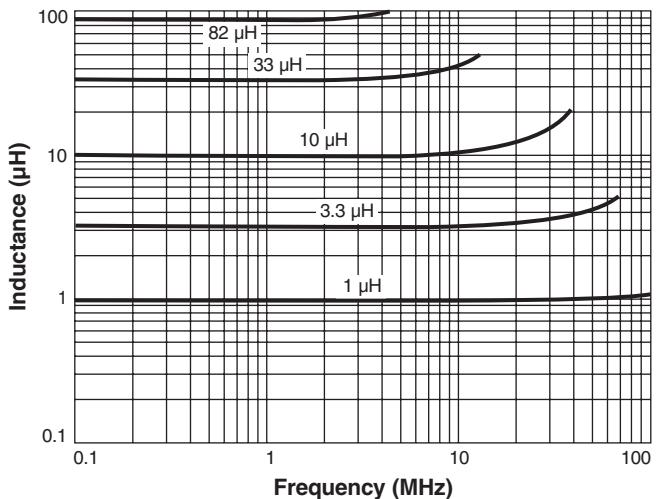


XFL2006 Shielded Power Inductor Series

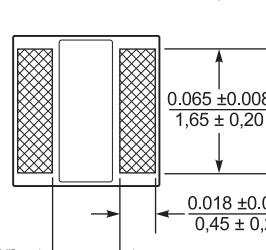
L vs Current



Typical L vs Frequency



Earlier production parts may not be marked with a dot.



Recommended Land Pattern

* 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.

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

Tape and reel orientation

