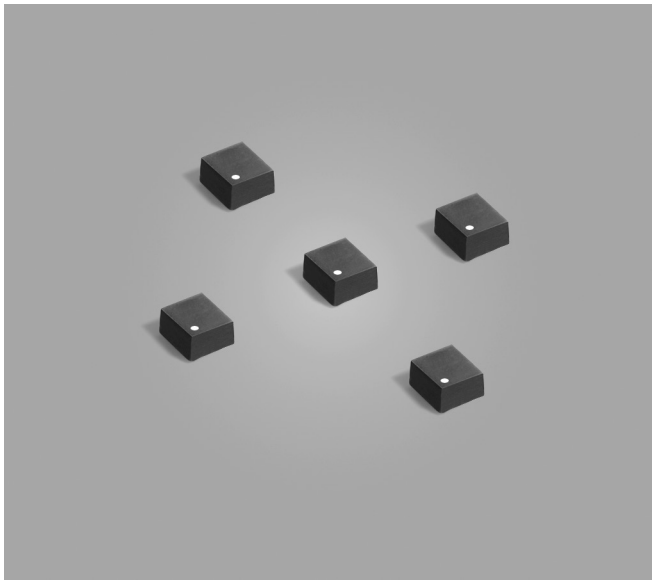
NEW!

RoHS/ REACH COMPLIANT

Halogen Free

AEC Q200 +125°C

Shielded Power Inductors XFL2010



- Ultra-miniature, magnetically shielded power inductors
- Very low DCR, excellent current handling, soft saturation
- AEC-Q200 Grade 1 (–40°C to +125°C)[8]

Core material Composite
Weight 19 – 21 mg
Operating voltage 40 V (higher ratings on request)
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.
Ambient temperature –40°C to +125°C[8] with (40°C rise) Irms current
Maximum part temperature +165°C[8] (ambient + temp rise).
Storage temperature Component: –55°C to +165°C[8]
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, 0.23 mm thick, 4 mm pocket spacing, 1.19 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] typ	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)[6] 20°C rise	Irms (A)[6] 40°C rise
XFL2010-400ME_	0.04	0.012	0.016	2200	5.50	7.50	8.60	3.40	4.80
XFL2010-121ME_	0.12	0.017	0.022	730	3.00	4.25	4.90	2.70	3.70
XFL2010-221ME_	0.22	0.020	0.025	400	2.10	3.20	3.75	2.30	3.10
XFL2010-381ME_	0.38	0.028	0.033	280	1.70	2.50	3.05	2.10	2.85
XFL2010-601ME_	0.60	0.047	0.054	200	1.30	1.95	2.32	1.75	2.35
XFL2010-821ME_	0.82	0.052	0.061	160	1.05	1.52	1.95	1.60	2.15
XFL2010-102ME_	1.0	0.072	0.083	130	0.95	1.42	1.68	1.30	1.80
XFL2010-152ME_	1.5	0.100	0.115	110	0.75	1.16	1.45	1.15	1.55
XFL2010-222ME_	2.2	0.136	0.156	90	0.70	1.06	1.25	1.00	1.35
XFL2010-332ME_	3.3	0.185	0.213	65	0.60	0.85	1.00	0.88	1.20
XFL2010-472ME_	4.7	0.278	0.320	60	0.42	0.64	0.78	0.68	0.91
XFL2010-682ME_	6.8	0.352	0.405	50	0.39	0.61	0.72	0.58	0.79
XFL2010-822ME_	8.2	0.445	0.511	40	0.38	0.55	0.62	0.56	0.76
XFL2010-103ME_	10	0.517	0.595	36	0.29	0.45	0.56	0.51	0.67
XFL2010-183ME_	18	1.02	1.17	29	0.245	0.370	0.435	0.34	0.46
XFL2010-223ME_	22	1.30	1.50	23	0.190	0.280	0.340	0.31	0.42
XFL2010-333ME_	33	1.86	2.14	18	0.160	0.240	0.285	0.26	0.35
XFL2010-473ME_	47	2.53	2.91	16	0.130	0.200	0.250	0.25	0.31
XFL2010-563ME_	56	3.18	3.66	15	0.120	0.175	0.215	0.20	0.27
XFL2010-683ME_	68	3.46	3.98	13	0.110	0.170	0.210	0.19	0.26
XFL2010-823ME_	82	5.05	5.81	12	0.096	0.150	0.185	0.16	0.21
XFL2010-104ME_	100	6.07	6.98	11	0.092	0.140	0.172	0.15	0.20
XFL2010-224ME_[8]	220	11.88	13.66	6	0.060	0.094	0.113	0.11	0.14

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

   XFL2010-224MEC

   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).
   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.
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.
7. Electrical specifications at 25°C.
8. -224 rated AEC-Q200 Grade 3. Maximum part temperature 125°C for this part number only.

Refer to Doc 362 “Soldering Surface Mount Components” before soldering.

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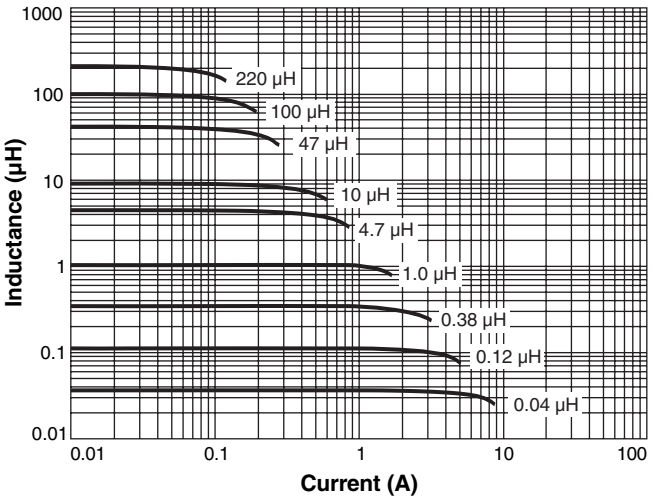
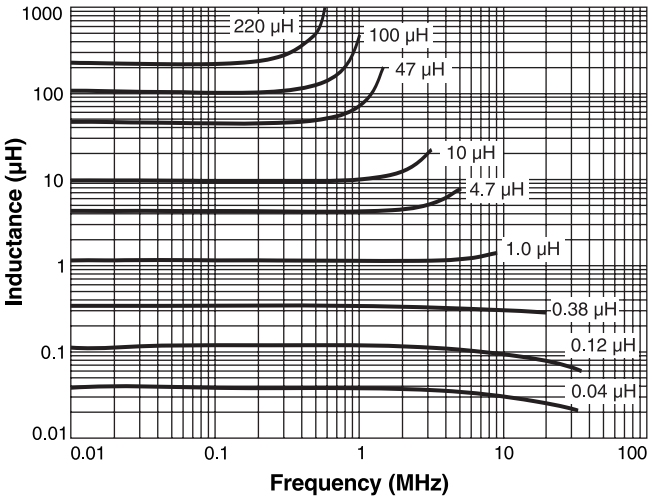
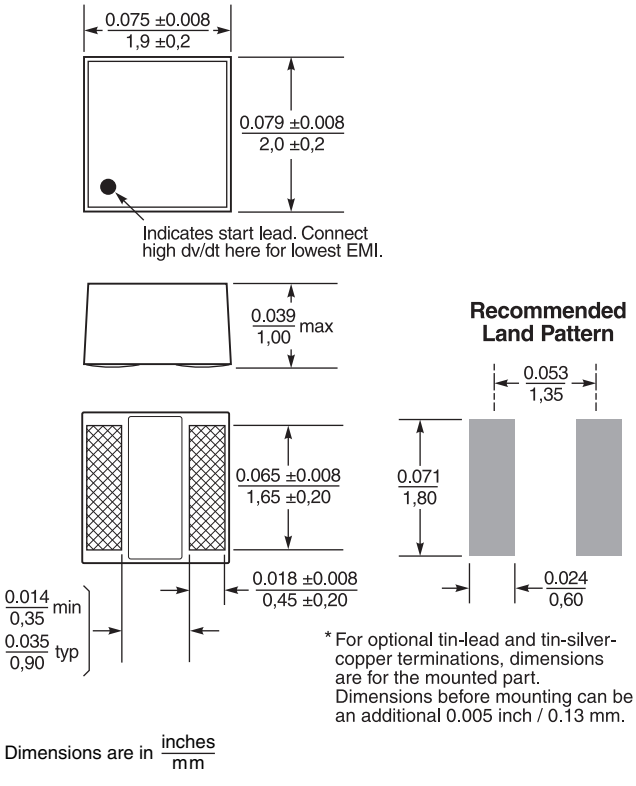
Shielded Power Inductors – XFL2010 Series

Typical L vs Current



Typical L vs Frequency





* 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 inches / mm

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