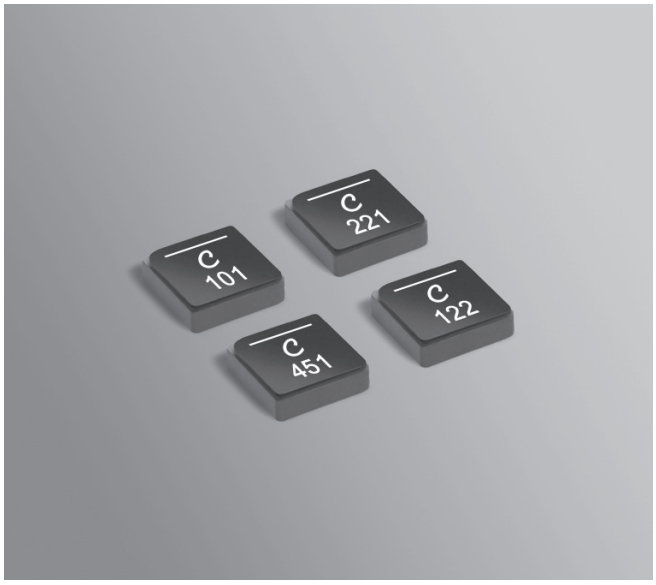
Shielded Power Inductors – XGL4012



- Industry's lowest DCR and ultra-low AC losses
- AEC-Q200 qualified
- Superior current handling with soft saturation characteristics
- Wide inductance range from 0.033 – 1.2 µH

Designer's Kit C517 contains 3 of each value
Core material Composite
Core and winding loss See www.coilcraft.com/coreloss
Environmental RoHS compliant, halogen free
Terminations RoHS compliant tin-silver (96.5/3.5) over copper. Other terminations available at additional cost.
Weight: 0.10 – 0.12 g
Operating voltage: 80 V[7]
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)
Packaging 1500/7″ reel; 5000/13″ reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 1.4 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 (mOhms)[3] typ	DCR (mOhms)[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
XGL4012-330ME_	0.033	1.2	1.5	800	31.5	23.2	32.0		
XGL4012-101ME_	0.10	2.4	2.9	270	8.9	14.6	21.5	13.8	19.7
XGL4012-221ME_	0.22	5.0	6.0	160	6.1	9.9	14.4	10.9	14.7
XGL4012-251ME_	0.25	6.8	8.2	150	5.8	9.3	13.3	10.1	13.9
XGL4012-381ME_	0.38	9.1	10.9	110	4.5	7.3	10.7	8.8	12.0
XGL4012-451ME_	0.45	11.5	13.8	105	4.4	7.0	9.9	8.0	10.9
XGL4012-601ME_	0.60	14.6	17.5	88	3.6	5.9	8.4	6.6	9.0
XGL4012-102ME_	1.0	25.0	29.9	67	2.9	4.6	6.6	5.2	7.0
XGL4012-122ME_	1.2	29.5	35.3	58	2.6	4.2	6.0	4.8	6.6

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

   XGL4012-122MEC

   Termination: **E** = RoHS compliant tin-silver over copper.
   Special order: T = RoHS tin-silver-copper (95.5/4/0.5) or **S** = non-RoHS tin-lead (63/37).

   Packaging: **C** = 7″ machine-ready reel. EIA-481 embossed plastic tape (1500 parts per 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 (5000 parts per reel). Factory order only, not stocked.
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. Temperature rise is highly dependent on many factors including pcb land pattern, trace size, air flow, and proximity to other components. Therefore temperature rise should be verified in application conditions. Click for temperature derating information.
7. Voltage capability varies by part number and in many cases may be higher than the listed voltage.
8. Electrical specifications at 25°C.

Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

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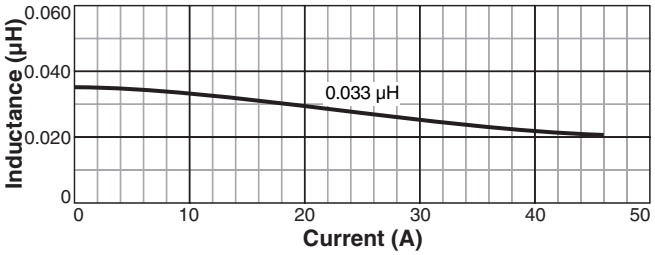
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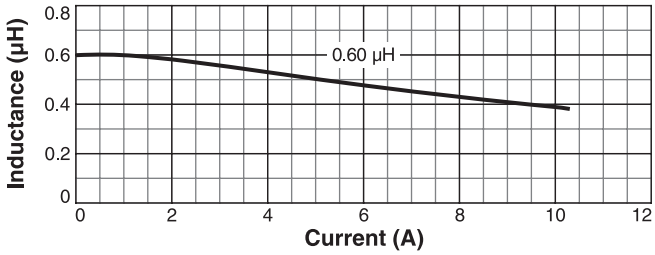
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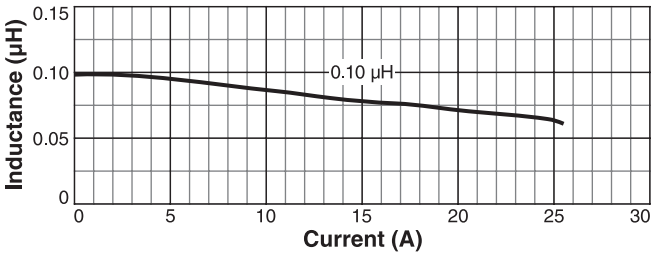
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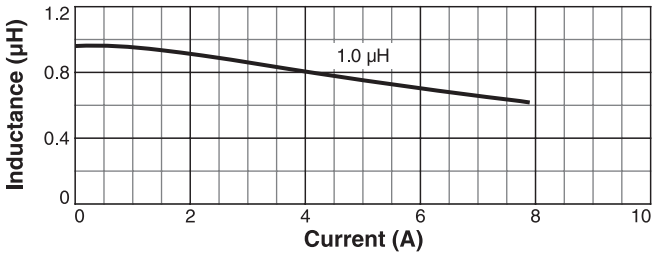
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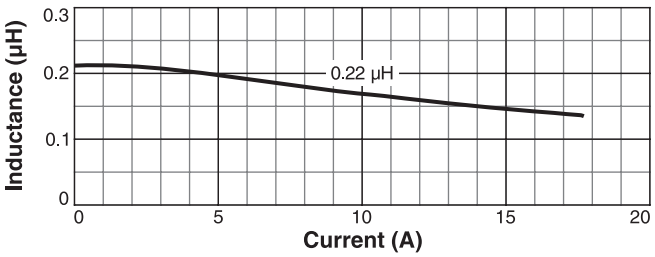
L vs Current

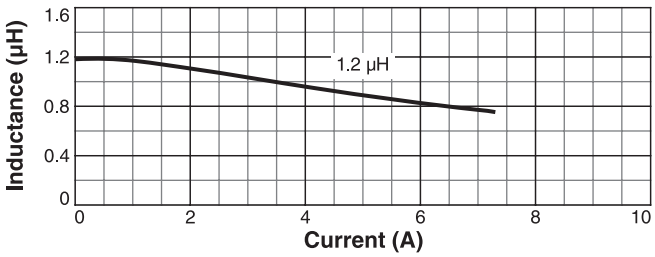


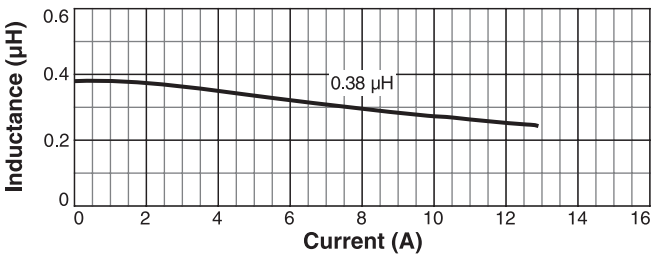


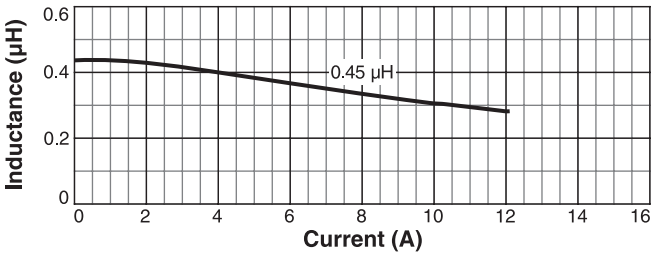












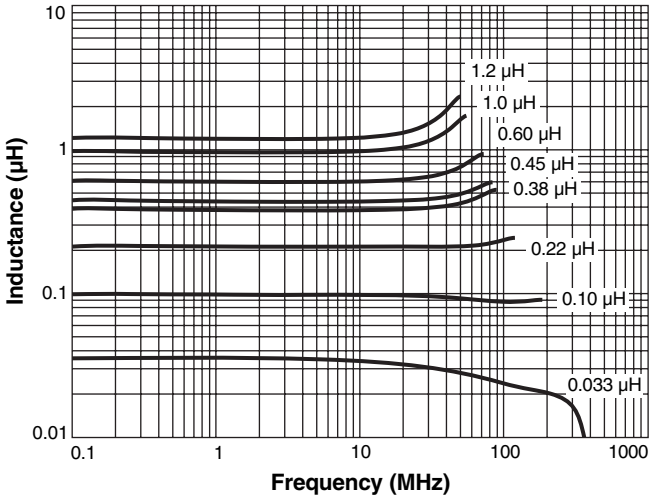
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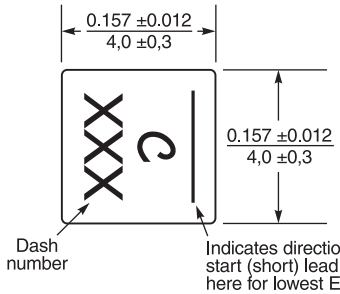
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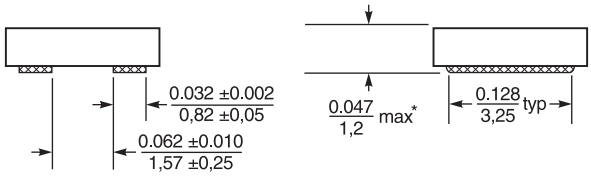
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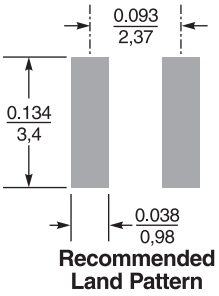
Typical L vs Frequency







* 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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