



Shielded Power Inductor – XFL3012



- High current, magnetically shielded power inductors
- 3 mm × 3 mm footprint; 1.2 mm maximum height

Designer's Kit C440 contains 5 of each XFL3012 and XFL3010 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 53 mg

Ambient temperature –40°C to +85°C with Irms current, +85°C to +125°C with derated current

Storage temperature Component: –40°C to +125°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, 1.25 mm pocket depth

PCB washing Tested with pure water or alcohol only. For other solvents, 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
XFL3012-221ME_	0.22	0.014	0.019	340	2.5	3.5	4.1	2.6	3.5
XFL3012-361ME_	0.36	0.019	0.023	210	2.3	3.1	3.5	2.2	3.0
XFL3012-601ME_	0.60	0.023	0.029	167	1.9	2.6	3.0	2.1	2.8
XFL3012-102ME_	1.0	0.035	0.042	115	1.6	2.2	2.5	1.9	2.6
XFL3012-152ME_	1.5	0.060	0.072	94.4	1.3	1.8	2.2	1.6	2.2
XFL3012-222ME_	2.2	0.081	0.097	73.2	1.0	1.3	1.6	1.4	1.9
XFL3012-332ME_	3.3	0.106	0.127	61.6	0.87	1.2	1.4	1.2	1.6
XFL3012-472ME_	4.7	0.143	0.171	52.6	0.72	1.0	1.2	1.0	1.4
XFL3012-682ME_	6.8	0.166	0.200	39.9	0.61	0.84	0.97	0.94	1.3
XFL3012-103ME_	10	0.255	0.306	34.6	0.50	0.65	0.74	0.90	1.2
XFL3012-153ME_	15	0.394	0.483	25.8	0.43	0.58	0.65	0.74	1.0
XFL3012-223ME_	22	0.608	0.630	22.2	0.32	0.45	0.52	0.58	0.80
XFL3012-333ME_	33	0.855	0.896	16.6	0.23	0.32	0.38	0.42	0.57
XFL3012-393ME_	39	0.919	0.985	15.9	0.23	0.32	0.37	0.39	0.54
XFL3012-473ME_	47	1.220	1.32	13.7	0.21	0.28	0.32	0.33	0.46
XFL3012-563ME_	56	1.430	1.52	12.1	0.19	0.26	0.30	0.32	0.44
XFL3012-683ME_	68	2.16	2.37	10.9	0.16	0.21	0.25	0.31	0.42
XFL3012-823ME_	82	2.30	2.44	10.8	0.15	0.21	0.24	0.26	0.34
XFL3012-104ME_	100	2.63	3.00	9.4	0.17	0.24	0.28	0.29	0.39
XFL3012-224ME_	220	6.83	8.00	6.1	0.09	0.14	0.16	0.17	0.23

1. When ordering, please specify **packaging** code:

XFL3012-472MEC

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 100 kHz, 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 which the inductance drops the specified amount from its value without current.

6. Current that causes the specified temperature rise from 25°C ambient.

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 747-1 Revised 04/18/13

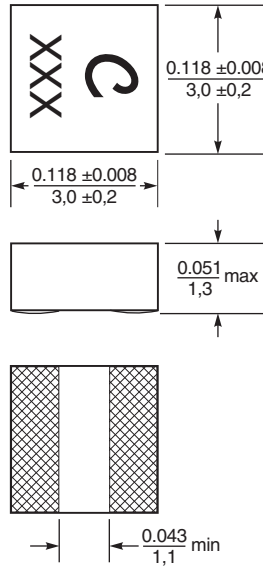
© Coilcraft Inc. 2013

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.



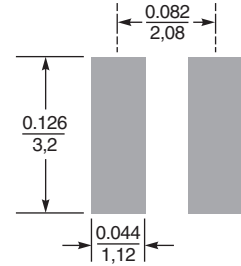
Shielded Power Inductor – XFL3012

Typical L vs Frequency



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

Recommended Land Pattern



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



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 747-2 Revised 04/18/13

© Coilcraft Inc. 2013

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 Inductor – XFL3012

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 747-3 Revised 04/18/13

© Coilcraft Inc. 2013

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 Inductor – XFL3012

L vs Current



Typical Irms Derating



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 747-4 Revised 04/18/13

© Coilcraft Inc. 2013

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.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.