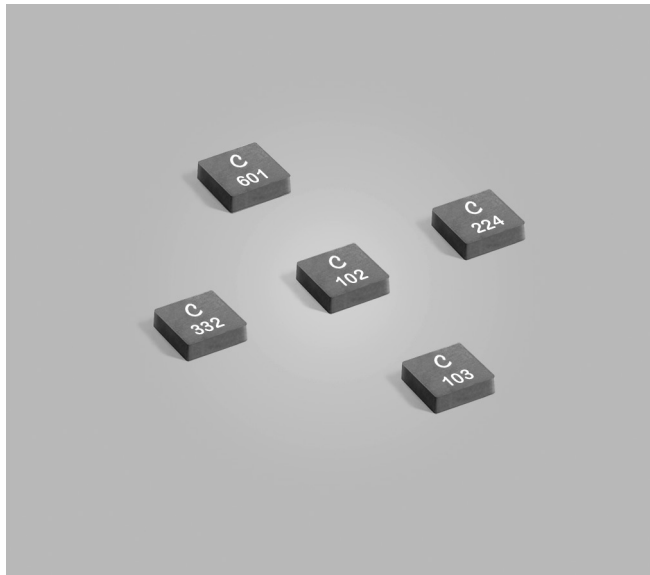




Shielded Power Inductors – XFL3010



- 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 +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, 1.14 mm pocket depth

PCB washing Only pure water or alcohol recommended

| Part number ¹ | Inductance ² ±20% (µH) | DCR (Ohms) ³ | | SRF typ ⁴ (MHz) | Isat (A) ⁵ | | | Irms (A) ⁵ | |
|--------------------------|--------------------------------------|-------------------------|-------|-------------------------------|-----------------------|----------|----------|-----------------------|-----------|
| | | nom | max | | 10% drop | 20% drop | 30% drop | 20°C rise | 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 **packaging** code:

XFL3010-222MEC

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.



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Shielded Power Inductors – XFL3010

Typical L vs Frequency



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



Recommended Land Pattern



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



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Shielded Power Inductors – XFL3010

Typical L vs Current



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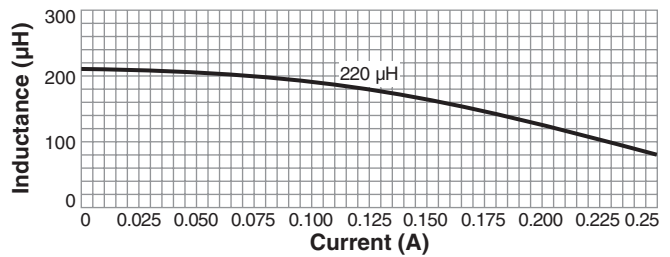
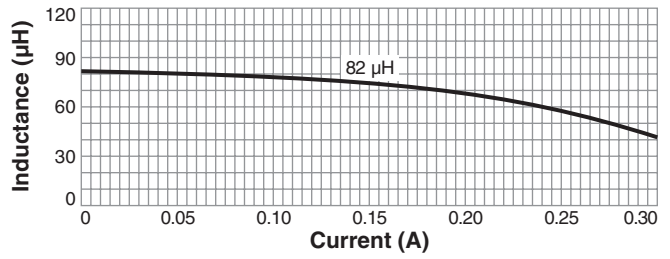
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Shielded Power Inductors – XFL3010

Typical L vs Current



Typical Irms Derating



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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.);

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- 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

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