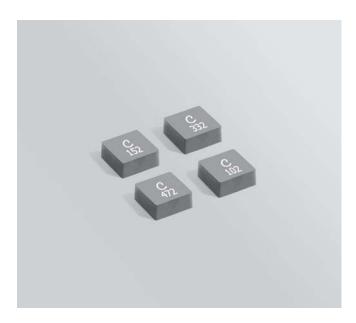
## NEWA Shielded Power Inductors - XFL4020



- Exceptionally low DCR 10.8 mOhm
- Excellent current handling capability

Designer's Kit C436 contains 5 each of all values
Environmental RoHS compliant, halogen free
Terminations RoHS compliant tin-silver over copper. Other terminations available at additional cost.
Core material Composite
Core and winding loss See www.coilcraft.com/coreloss
Weight 162 – 169 mg
Ambient temperature -40°C to +90°C with Irms current, +90°C to +130°C with derated current.
Storage temperature Component: -40°C to +130°C.

**Storage temperature** Component: -40°C to +130°C. T&R 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 1000/7"reel; 3500/13" reel Plastic tape: 12 mm wide, 0.23 mm thick, 8 mm pocket spacing, 2.3 mm pocket depth PCB washing Only pure water or alcohol recommended

	Inductance <sup>2</sup>	DCR (mOhms)		SRF typ <sup>4</sup>	<b>Isat (A)</b> <sup>5</sup>			Irms (A) <sup>6</sup>	
Part number <sup>1</sup>	±20% (μH)	typ <sup>3</sup>	max <sup>3</sup>	(MHz)	10% drop	20% drop	30% drop	20°C rise	40°C rise
XFL4020-102ME_	1.0	10.80	11.90	64	4.5	5.1	5.4	8.0	11.0
XFL4020-152ME_	1.5	14.40	15.80	59	4.1	4.4	4.6	6.7	9.1
XFL4020-222ME_	2.2	21.35	23.50	38	3.1	3.5	3.7	6.0	8.0
XFL4020-332ME_	3.3	34.80	38.30	33	2.7	2.8	2.9	3.9	5.2
XFL4020-472ME_	4.7	52.20	57.40	26	2.0	2.5	2.7	3.6	5.0

1. When ordering, please specify packaging code:

## XFL4020-472ME C

- **Packaging:** C = 7" machine-ready reel. EIA-481 embossed plastic tape (1000 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 (3500 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.
- DC current at which the inductance drops the specified amount from its value without current.
- Current that causes the specified temperature rise from 25°C ambient.
   Electrical specifications at 25°C.

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

## **Irms Testing**

Irms testing was performed on 0.75 inch wide  $\times$  0.25 inch thick copper traces in still air.

Temperature rise is highly dependent on many factors including pcb land pattern, trace size, and proximity to other components. Therefore temperature rise should be verified in application conditions.



Specifications subject to change without notice. Please check our website for latest information.

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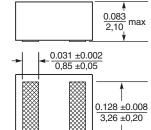
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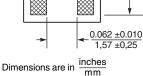
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 $\overbrace{4,0 \pm 0,3}^{\bullet 0.157 \pm 0.012}$ 

Dash



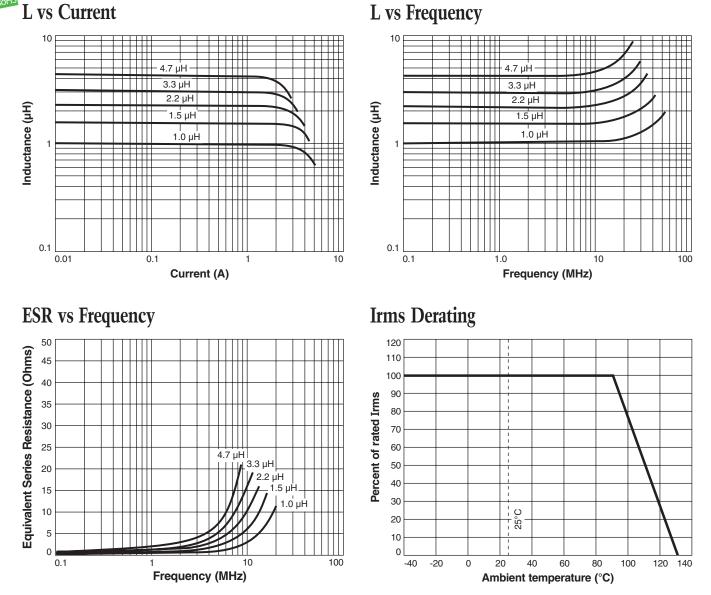




Recommended







Coilcraft

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Document 745-2 Revised 02/10/11

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