

# Shielded Power Inductors - VER2923



- Designed for high current power supply applications with saturation current ratings to over 100 Amps
- Ideal for use in Class-D applications
- Flat wire windings provide extremely low DC and AC resistance
- · Vertical mounting provides a small footprint

#### Core material Ferrite

Core and winding loss See www.coilcraft.com/coreloss

**Terminations** RoHS compliant tin-silver over copper. Other terminations available at additional cost.

Weight 37 g

Ambient temperature  $-40^{\circ}\text{C}$  to  $+85^{\circ}\text{C}$  with  $(40^{\circ}\text{C rise})$  Irms current. Maximum part temperature  $+125^{\circ}\text{C}$  (ambient + temp rise). Derating. Storage temperature Component:  $-40^{\circ}\text{C}$  to  $+125^{\circ}\text{C}$ .

Tape and reel packaging: -40°C to +80°C

Moisture Sensitivity Level (MSL) 1 (unlimited floor life at  $<30^{\circ}$ 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 25 parts per tray

**PCB washing** Tested to MIL-STD-202 Method 215 plus an additional aqueous wash. See Doc787\_PCB\_Washing.pdf.

Part	Inductance <sup>1</sup>	DCR (mOhms)2		SRF typ <sup>3</sup>	<b>Isat (A)</b> <sup>4</sup>			Irms (A) <sup>5</sup>	
number	±10% (µH)	nom	max	(MHz)	10% drop	20% drop	30% drop	20°C rise	40°C rise
VER2923-332KL	3.3	2.3	2.6	40	95.0	104	108	19	26
VER2923-472KL	4.7	2.3	2.6	30	63.0	69.0	72.0	19	26
VER2923-682KL	6.8	2.3	2.6	25	48.0	53.0	56.0	19	26
VER2923-103KL	10	2.3	2.6	20	30.0	34.0	37.0	19	26
VER2923-153KL	15	2.3	2.6	16	20.5	23.0	24.5	19	26
VER2923-223KL	22	2.3	2.6	13	12.2	14.7	16.4	19	26
VFR2923-333KI	33	2.3	2.6	10	7.5	9.2	10.3	19	26

- 1. Inductance tested at 300 kHz, 0.1 Vrms on Agilent/HP 4192A.
- 2. DCR measured on a Keithley 580 micro-ohmmeter or equivalent.
- 3. SRF measured on an Agilent/HP 8753ES network analyzer.
- 4. DC current at 25°C that causes the specified inductance drop from its value without current. Click for temperature derating information.
- Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings. Click for temperature derating information.

Temperature rise of the core is usually less than that of the winding. When Irms is greater than Isat, Isat is the more critical specification and Irms is shown in

6. Electrical specifications at 25°C.

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

### Caution:

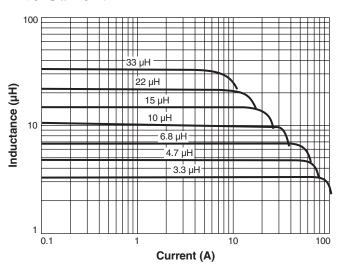
This series is not intended for use in high vibration environments. We advise using additional means of securing the part to the circuit board to ensure its adhesion.



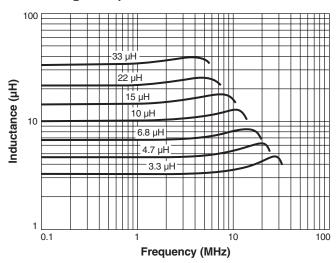


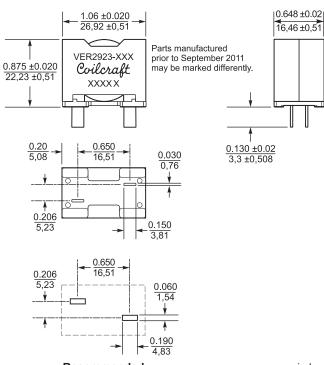
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### L vs Current



## L vs Frequency







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

