







# High Frequency, High Current Power Inductors





- · Significantly high Q factor twice as high as 2014VS
- High current handling

• Ideal for use as a low-loss choke on RF power amplifiers **Environmental** RoHS compliant, halogen free

Terminations RoHS compliant tin-silver over copper

Weight 1.99 – 2.74 g

Ambient temperature  $-40^{\circ}$ C~125°C with Irms current Maximum part temperature +155°C (ambient + temp rise). Storage temperature Component:  $-40^{\circ}$ C to +155°C. Tape and reel packaging:  $-40^{\circ}$ C to +80°C

**Resistance to soldering heat** Max three 40 second reflows at +260°C, parts cooled to room temperature between cycles

Temperature Coefficient of Inductance (TCL) +5 to +70 ppm/°C Moisture Sensitivity Level (MSL) 1 (unlimited floor life at <30°C / 85% relative humidity)

Packaging ZA9423-33N 500/13"reel; Plastic tape: 32 mm wide, 0.50 mm thick, 20 mm pocket spacing, 6.4 mm pocket depth; ZA9423-66N 450/13"reel; Plastic tape: 32 mm wide, 0.50 mm thick, 20 mm pocket spacing, 6.8 mm pocket depth

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

Part number <sup>1</sup>	Inductance <sup>2</sup> ±20% (nH)		Q test	SRF typ⁴ (MHz)	DCR (mOhm)		Irms (A)⁵	
		Q³ typ	freq (MHz)				20°C	40°C
					typ	max	rise	rise
ZA9423-33NMED	33	456	100	817	0.53	0.62	30.2	42.0
ZA9423-66NMED	66	404	100	436	0.75	0.90	27.0	38.5

1. Packaging: D = 13" machine-ready reel; EIA-481 embossed plastic tape (ZA9423-33N, 500 parts per full reel; ZA9423-66N, 450 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).

 Inductance measured at 1.0 MHz, 0.1 Vrms, 0 A using an Agilent/HP HP4291A impedance analyzer with an Agilent/HP 16193A test fixture or equivalents.

3. Q measured at the specified frequency using an Agilent/HP 4291A impedance analyzer or equivalent.

 SRF measured using an Agilent/HP 8753 network analyzer or equivalent and a Coilcraft CCF1199 test fixture

 Current that causes the specified temperature rise from 25°C ambient. This information is for reference only and does not represent absolute maximum ratings.

6. Electrical specifications at 25°C.

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



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### L vs Frequency



Q vs Frequency





All dimensions are in  $\frac{\text{inches}}{\text{mm}}$ .



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