



# 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°C~125°C with Irms current

**Maximum part temperature** +155°C (ambient + temp rise).

**Storage temperature** Component: –40°C to +155°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

**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 <sup>3</sup> typ	Q test freq (MHz)	SRF typ <sup>4</sup> (MHz)	DCR (mOhm)		Irms (A) <sup>5</sup>	
					typ	max	20°C rise	40°C 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

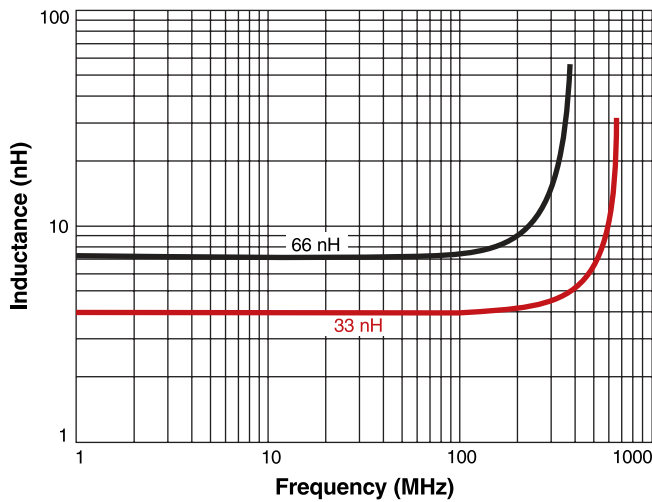
- Packaging:** D = 13" machine-ready reel; EIA-481 embossed plastic tape (ZA9423-33N, 500 parts per full reel; ZA9423-66N, 450 parts per full reel). Quantities less than full reel available: in tape (not machine ready) or with leader and trailer (\$25 charge).
- Inductance measured at 1.0 MHz, 0.1 Vrms, 0 A using an Agilent/HP HP4291A impedance analyzer with an Agilent/HP 16193A test fixture or equivalents.
- 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.
- Electrical specifications at 25°C. Refer to Doc 362 "Soldering Surface Mount Components" before soldering.

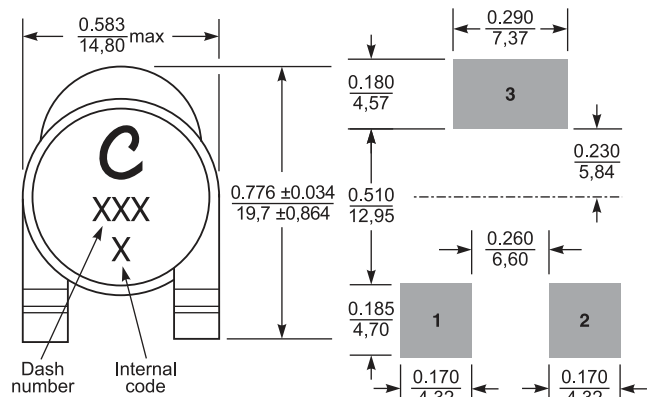
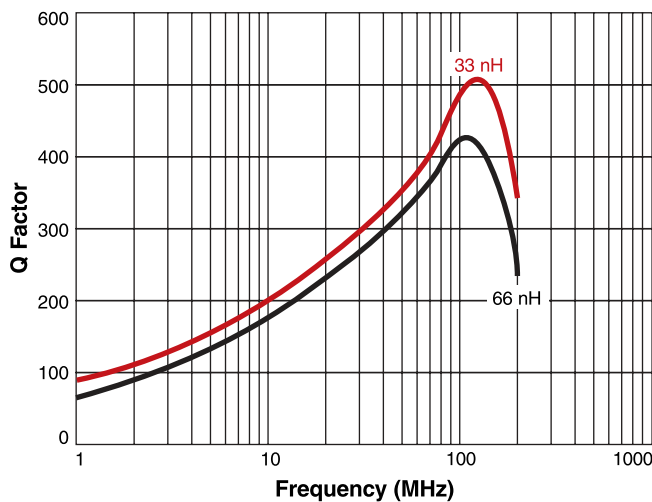


# High Frequency, High Current Power Inductors – ZA9423

## L vs Frequency

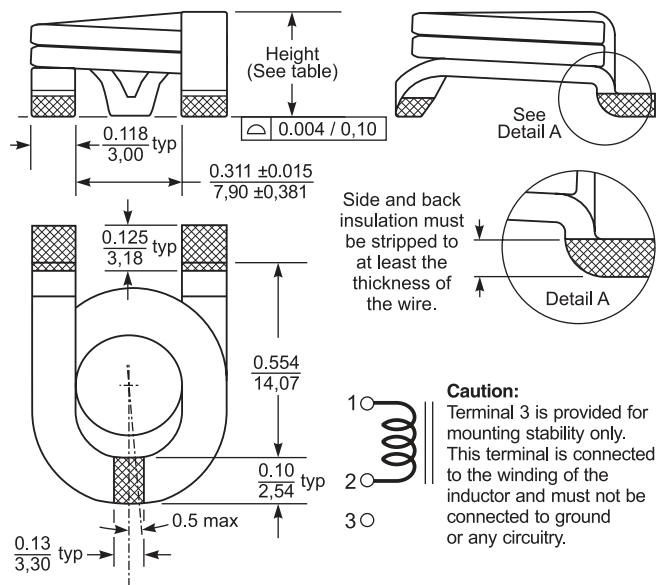


## Q vs Frequency



Part number	Height (max)		Weight (g)
	inches	mm	
ZA9423-33N	0.250	6,35	1.99
ZA9423-66N	0.279	7,09	2.74

## Recommended Land Pattern



**Caution:**  
Terminal 3 is provided for mounting stability only. This terminal is connected to the winding of the inductor and must not be connected to ground or any circuitry.

All dimensions are in inches/mm.



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