



Part Number: **FS-090014-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	22.86 mm	0.900 in										
	(max. - after coating)	23.62 mm	0.930 in										
ID	(nom. - bare core)	13.97 mm	0.550 in										
	(min. - after coating)	13.39 mm	0.527 in										
Ht	(nom. - bare core)	7.62 mm	0.300 in										
	(max. - after coating)	8.38 mm	0.330 in										
Mass	(approximate)	10 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.331 cm ²											
	L _e - Eff. Mag. Path Length	5.67 cm											
	V _e - Eff. Core Volume	1.88 cm ³											
	WA - Min. Eff. Window Area	1.41 cm ²											
	sa - Surface Area	19.8 cm ²											
	mlt - mean length per turn	3.37 cm											
	Inductance	μ _i (reference)	14										
Core Loss	A _L value (nominal)	9.9 nH/N ²											
	Test Winding	N=80, #26 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.12 V											
	AL tolerance	±8%											
DC Saturation	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$												
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.000E+06, b=6.131E+07, c=2.047E+06, d=6.095E-14												
	B _{pk}	300 G											
	frequency	100 kHz											
	Core Loss (nominal)	399 mW/cm ³											
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: a=1.000E-02, b=2.600E-07, c=1.557, d=0.000												
	H _{DC}	200 Oe											
	Percent Initial Perm(nom.)	90.9%											
Coating/Pkg	Percent Initial Perm(min.)	88.3%											
	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
	Limit	0.1 mA, 5 s											
Winding Table	Package Quantity	1,210 Pcs/Box											
	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	11	15	19	24	31	39	50	62	78	98	123
		Rdc(Ω)	1.2 m	2.6 m	5.3 m	10.6 m	21.8 m	43.7 m	89.1 m	175.8 m	351.6 m	702.7 m	1.4
	Full Winding	Turns	11	18	27	42	65	101	157	243	376	581	900
		Rdc(Ω)	1.2 m	3.2 m	7.5 m	18.6 m	45.8 m	113.2 m	279.8 m	688.8 m	1.7	4.2	10.3

