



Part Number: **FS-135014-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	34.29 mm	1.350 in
	(max. - after coating)	35.10 mm	1.382 in
ID	(nom. - bare core)	23.37 mm	0.920 in
	(min. - after coating)	22.56 mm	0.888 in
Ht	(nom. - bare core)	8.89 mm	0.350 in
	(max. - after coating)	9.83 mm	0.387 in
Mass	(approximate)	22 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.454 cm ²	
	L _e - Eff. Mag. Path Length	8.95 cm	
	V _e - Eff. Core Volume	4.06 cm ³	
	WA - Min. Eff. Window Area	4.00 cm ²	
	sa - Surface Area	41.4 cm ²	
	mlt - mean length per turn	4.35 cm	
Inductance	μ _i (reference)	14	
	A _L value (nominal)	9 nH/N ²	
	Test Winding	N=90, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.18 V	
AL tolerance	±8%		
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	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	
Core Loss (maximum)	459 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%	
Percent Initial Perm (min.)	88.3%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	441 Pcs/Box	

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	16	21	27	34	43	54	68	85	107	134	167
		Rdc(Ω)	1.4 m	3.0 m	6.1 m	12.2 m	24.6 m	49.1 m	98.4 m	195.6 m	391.5 m	779.8 m	1.5
Full Winding	Turns	21	32	50	78	120	186	288	445	689	1,066	1,651	
	Rdc(Ω)	1.9 m	4.5 m	11.3 m	28.1 m	68.6 m	169.2 m	416.6 m	1.0	2.5	6.2	15.3	

