



Part Number: **FS-400014-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	101.60 mm	4.000 in
	(max. - after coating)	102.87 mm	4.050 in
ID	(nom. - bare core)	57.15 mm	2.250 in
	(min. - after coating)	55.75 mm	2.195 in
Ht	(nom. - bare core)	16.51 mm	0.650 in
	(max. - after coating)	17.78 mm	0.700 in
Mass	(approximate)	470 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.52 cm ²	
	L _e - Eff. Mag. Path Length	24.271 cm	
	V _e - Eff. Core Volume	85.5 cm ³	
	WA - Min. Eff. Window Area	24.4 cm ²	
	sa - Surface Area	303 cm ²	
	mlt - mean length per turn	11.1 cm	
	Inductance	μ _i (reference)	14
Core Loss	A _L value (nominal)	25.6 nH/N ²	
	Test Winding	N=140, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	2.2 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	16 Pcs/Box	
	Wire Size	AWG	8 10 12 14 16 18 20 22 24 26 28
Single Layer	mm	3.150 2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315	
	Turns	44 56 70 88 110 138 172 215 268 335 417	
Full Winding	Rdc(Ω)	10.0 m 20.2 m 40.2 m 80.5 m 160.0 m 319.2 m 632.7 m 1.3 2.5 5.0 9.8	
	Turns	128 198 306 474 733 1,135 1,756 2,719 4,208 6,512 10,079	
Full Winding	Rdc(Ω)	29.1 m 71.6 m 175.9 m 433.4 m 1.1 2.6 6.5 15.9 39.1 96.4 237.2	

