



Part Number: **FS-292040-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	74.10 mm	2.917 in
	(max. - after coating)	75.20 mm	2.961 in
ID	(nom. - bare core)	45.30 mm	1.783 in
	(min. - after coating)	44.10 mm	1.736 in
Ht	(nom. - bare core)	35.00 mm	1.378 in
	(max. - after coating)	36.20 mm	1.425 in
Mass	(approximate)	600 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	4.94 cm ²	
	L _e - Eff. Mag. Path Length	18.4 cm	
	V _e - Eff. Core Volume	90.9 cm ³	
	WA - Min. Eff. Window Area	15.3 cm ²	
	sa - Surface Area	228 cm ²	
	mlt - mean length per turn	12.6 cm	
Inductance	μ _i (reference)	40	
	A _L value (nominal)	137 nH/N ²	
	Test Winding	N=100, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	2.2 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=3.071E+08, c=3.524E+06, d=5.634E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	780 mW/cm ³	
Core Loss (maximum)	897 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=6.314E-08, c=2.151, d=0.000		
	H _{DC}	200 Oe	
	Percent Initial Perm (nom.)	64.0%	
Percent Initial Perm (min.)	54.5%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	18 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	35	44	55	69	87	109	136	170	212	264	329
		Rdc(Ω)	9.0 m	18.1 m	35.9 m	71.7 m	143.7 m	286.3 m	568.1 m	1.1	2.2	4.4	8.8
Full Winding	Turns	80	124	192	296	459	710	1,099	1,701	2,633	4,075	6,307	
	Rdc(Ω)	20.7 m	50.9 m	125.4 m	307.4 m	758.0 m	1.9	4.6	11.3	27.8	68.5	168.5	

