



Part Number: FS-600040-2

Revision 20190529 - Generated 2019-May-29



(If coated, Max./Min. includes coating)

OD	(nom. - bare core) (max.)	152.40 mm 153.90 mm	6.000 in 6.059 in										
ID	(nom. - bare core) (min.)	81.28 mm 79.65 mm	3.200 in 3.136 in										
HT	(nom. - bare core) (max.)	20.32 mm 21.72 mm	0.800 in 0.855 in										
Mass	(approximate)	1,670 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	7.05 cm ²											
	L _e - Eff. Mag. Path Length	35.97 cm											
	V _e - Eff. Core Volume	253 cm ³											
	WA - Min. Eff. Window Area	49.8 cm ²											
	sa - Surface Area	646 cm ²											
	mlt - mean length per turn	15.8 cm											
Inductance	μ _i (reference)	40											
	A _L value (nominal)	102 nH/N ²											
	Test Winding	N=200, #18 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	6.3 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	4 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	65	81	102	127	159	198	247	309	385	479	597
		Rdc(Ω)	21.1 m	41.7 m	83.6 m	165.5 m	329.4 m	652.5 m	1.3	2.6	5.1	10.1	20.0
Full Winding	Turns	261	404	625	967	1,497	2,316	3,585	5,549	8,589	13,293	20,574	
	Rdc(Ω)	84.5 m	208.1 m	512.0 m	1.3	3.1	7.6	18.8	46.2	113.9	280.2	689.8	

