



Part Number: **FS-092040-2**

Revision 20190529 - Generated 2019-May-29



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

OD	(nom. - bare core) (max.)	23.57 mm 24.28 mm	0.928 in 0.956 in										
ID	(nom. - bare core) (min.)	14.40 mm 13.77 mm	0.567 in 0.542 in										
HT	(nom. - bare core) (max.)	8.89 mm 9.70 mm	0.350 in 0.382 in										
Mass	(approximate)	15 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.388 cm ²											
	L _e - Eff. Mag. Path Length	5.88 cm											
	V _e - Eff. Core Volume	2.28 cm ³											
	WA - Min. Eff. Window Area	1.49 cm ²											
	sa - Surface Area	21.8 cm ²											
	mlt - mean length per turn	3.68 cm											
Inductance	μ _i (reference)	40											
	A _L value (nominal)	34 nH/N ²											
	Test Winding	N=80, #26 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.14 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	1,089 Pcs/Box											
Winding Table	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	12	15	20	25	32	40	51	64	80	101	126
		Rdc(Ω)	1.4 m	2.9 m	6.1 m	12.1 m	24.6 m	49.0 m	99.3 m	198.2 m	394.0 m	791.0 m	1.6
	Full Winding	Turns	12	19	29	45	69	107	166	257	397	615	952
		Rdc(Ω)	1.4 m	3.6 m	8.8 m	21.8 m	53.1 m	131.0 m	323.2 m	795.8 m	2.0	4.8	11.9

