



Part Number: **FS-080075-2**

Revision 20190529 - Generated 2019-May-29



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

OD	(nom. - bare core) (max.)	20.32 mm 21.08 mm	0.800 in 0.830 in	
ID	(nom. - bare core) (min.)	12.70 mm 12.07 mm	0.500 in 0.475 in	
HT	(nom. - bare core) (max.)	6.35 mm 7.11 mm	0.250 in 0.280 in	
Mass	(approximate)	7.9 grams		
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.226 cm ²		
	L _e - Eff. Mag. Path Length	5.09 cm		
	V _e - Eff. Core Volume	1.15 cm ³		
	WA - Min. Eff. Window Area	1.14 cm ²		
	sa - Surface Area	15.5 cm ²		
Inductance	μ _i (reference)	75		
	A _L value (nominal)	41 nH/N ²		
	Test Winding	N=90, #28 AWG		
	Frequency	10 kHz		
	Voltage on Agilent 4284A	0.090 V		
Core Loss	AL tolerance	±8%		
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$			
	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.883E+08, b=5.098E+08, c=1.162E+06, d=5.024E-14			
	B _{pk}	1000 G		
	frequency	50 kHz		
DC Saturation	Core Loss (nominal)	772 mW/cm ³		
	Core Loss (maximum)	887 mW/cm ³		
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$			
	where H expressed in oersteds, and: a=1.000E-02, b=3.486E-06, c=1.682, d=0.000			
	H _{DC}	80 Oe		
Coating/Pkg	Percent Initial Perm(nom.)	64.4%		
	Percent Initial Perm(min.)	57.1%		
	Coating Type:	Blue Epoxy		
	Voltage Breakdown (min.)	1000 Vrms		
Winding Table	Limit	0.1 mA, 5 s		
	Package Quantity	1,800 Pcs/Box		
	Wire Size	AWG	10	12
		mm	2.500	2.000
Single Layer	Turns	10	13	
	Rdc(Ω)	1.0 m	2.0 m	
Full Winding	Turns	9	14	
	Rdc(Ω)	0.9 m	2.1 m	

