



Part Number: **FS-065090-2**

Revision 20190529 - Generated 2019-May-29



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

OD	(nom. - bare core) (max.)	16.64 mm 17.40 mm	0.655 in 0.685 in
ID	(nom. - bare core) (min.)	10.16 mm 9.53 mm	0.400 in 0.375 in
HT	(nom. - bare core) (max.)	6.35 mm 7.11 mm	0.250 in 0.280 in
Mass	(approximate)	5.4 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.192 cm ²	
	L _e - Eff. Mag. Path Length	4.11 cm	
	V _e - Eff. Core Volume	0.789 cm ³	
	WA - Min. Eff. Window Area	0.713 cm ²	
	sa - Surface Area	11.2 cm ²	
Inductance	μ _i (reference)	90	
	A _L value (nominal)	52 nH/N ²	
Core Loss	Test Winding	N=70, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.060 V	
	AL tolerance	±8%	
	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
DC Saturation	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.000E+06, b=5.648E+08, c=7.440E+04, d=6.942E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	869 mW/cm ³	
	Core Loss (maximum)	999 mW/cm ³	
DC Saturation	%μ _i = $\frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.000E-02, b=8.566E-06, c=1.584, d=0.000		
	H _{DC}	50 Oe	
	Percent Initial Perm(nom.)	70.4%	
Coating/Pkg	Percent Initial Perm(min.)	64.0%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
Winding Table	Package Quantity	2,880 Pcs/Box	
	Wire Size	AWG	12 14 16 18 20 22 24 26 28 30 32
Single Layer	mm	2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315 0.250 0.200	
	Turns	10 13 17 21 27 34 44 55 69 86 108	
Full Winding	Rdc(Ω)	1.4 m 2.9 m 6.0 m 11.8 m 24.1 m 48.3 m 99.4 m 197.7 m 394.4 m 781.8 m 1.6	
	Turns	9 14 21 33 51 79 123 190 295 456 706	
Full Winding	Rdc(Ω)	1.3 m 3.1 m 7.4 m 18.5 m 45.6 m 112.3 m 278.0 m 682.9 m 1.7 4.1 10.2	

