



Part Number: **FS-250014-2**

Revision 20190529 - Generated 2019-May-29



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

OD	(nom. - bare core) (max.)	63.50 mm 64.77 mm	2.500 in 2.550 in
ID	(nom. - bare core) (min.)	31.37 mm 30.48 mm	1.235 in 1.200 in
HT	(nom. - bare core) (max.)	25.00 mm 25.90 mm	0.984 in 1.020 in
Mass	(approximate)	310 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.89 cm ²	
	L _e - Eff. Mag. Path Length	14.314 cm	
	V _e - Eff. Core Volume	55.8 cm ³	
	WA - Min. Eff. Window Area	7.30 cm ²	
	sa - Surface Area	150 cm ²	
Inductance	μ _i (reference)	14	
	A _L value (nominal)	48 nH/N ²	
Core Loss	Test Winding	N=100, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	1.7 V	
	AL tolerance	±8%	
	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
DC Saturation	where B _{pk} expressed in gauss, f expressed in hertz, and: a=1.000E+06, b=6.131E+07, c=2.047E+06, d=6.095E-14		
	B _{pk}	300 G	
	frequency	100 kHz	
	Core Loss (nominal)	399 mW/cm ³	
	Core Loss (maximum)	459 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=2.600E-07, c=1.557, d=0.000		
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	90.9%	
Coating/Pkg	Percent Initial Perm(min.)	88.3%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
Winding Table	Package Quantity	27 Pcs/Box	
	Wire Size	AWG	8 10 12 14 16 18 20 22 24 26 28
Single Layer	mm	3.150 2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315	
	Turns	23 29 37 47 59 74 93 116 145 182 227	
Full Winding	Rdc(Ω)	4.8 m 9.6 m 19.5 m 39.4 m 78.6 m 156.9 m 313.5 m 622.0 m 1.2 2.5 4.9	
	Turns	38 59 91 142 219 339 525 813 1,258 1,947 3,013	
Full Winding	Rdc(Ω)	7.9 m 19.6 m 48.0 m 119.0 m 291.9 m 718.6 m 1.8 4.4 10.7 26.4 65.0	

