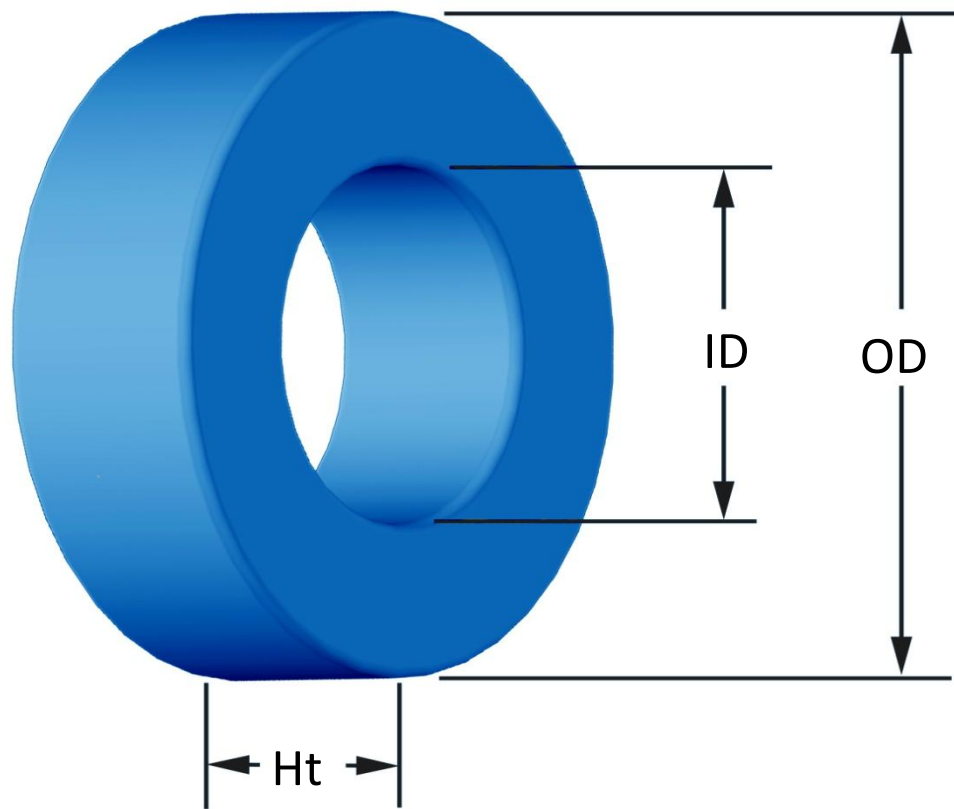




Part Number: **FS-185075-2**

Revision 20190529 - Generated 2019-May-29



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

OD	(nom. - bare core) (max.)	46.74 mm 47.63 mm	1.840 in 1.875 in
ID	(nom. - bare core) (min.)	28.70 mm 27.89 mm	1.130 in 1.098 in
HT	(nom. - bare core) (max.)	15.24 mm 16.13 mm	0.600 in 0.635 in
Mass	(approximate)	110 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.34 cm ²	
	L _e - Eff. Mag. Path Length	11.62 cm	
	V _e - Eff. Core Volume	15.6 cm ³	
	WA - Min. Eff. Window Area	6.11 cm ²	
	sa - Surface Area	79.6 cm ²	
Inductance	μ _i (reference)	75	
	A _L value (nominal)	107 nH/N ²	
Core Loss	Test Winding	N=80, #20 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.48 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=1.883E+08, b=5.098E+08, c=1.162E+06, d=5.024E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	772 mW/cm ³	
	Core Loss (maximum)	887 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=3.486E-06, c=1.682, d=0.000		
	H _{DC}	80 Oe	
	Percent Initial Perm(nom.)	64.4%	
Coating/Pkg	Percent Initial Perm(min.)	57.1%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
Winding Table	Package Quantity	125 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	21 27 34 43 54 68 85 106 133 166 207	
Full Winding	Rdc(Ω)	2.8 m 5.8 m 11.7 m 23.5 m 46.8 m 93.8 m 186.5 m 369.9 m 738.1 m 1.5 2.9	
	Turns	32 49 77 119 184 284 440 680 1,053 1,630 2,523	
Full Winding	Rdc(Ω)	4.3 m 10.6 m 26.4 m 64.9 m 159.6 m 391.8 m 965.4 m 2.4 5.8 14.4 35.4	

