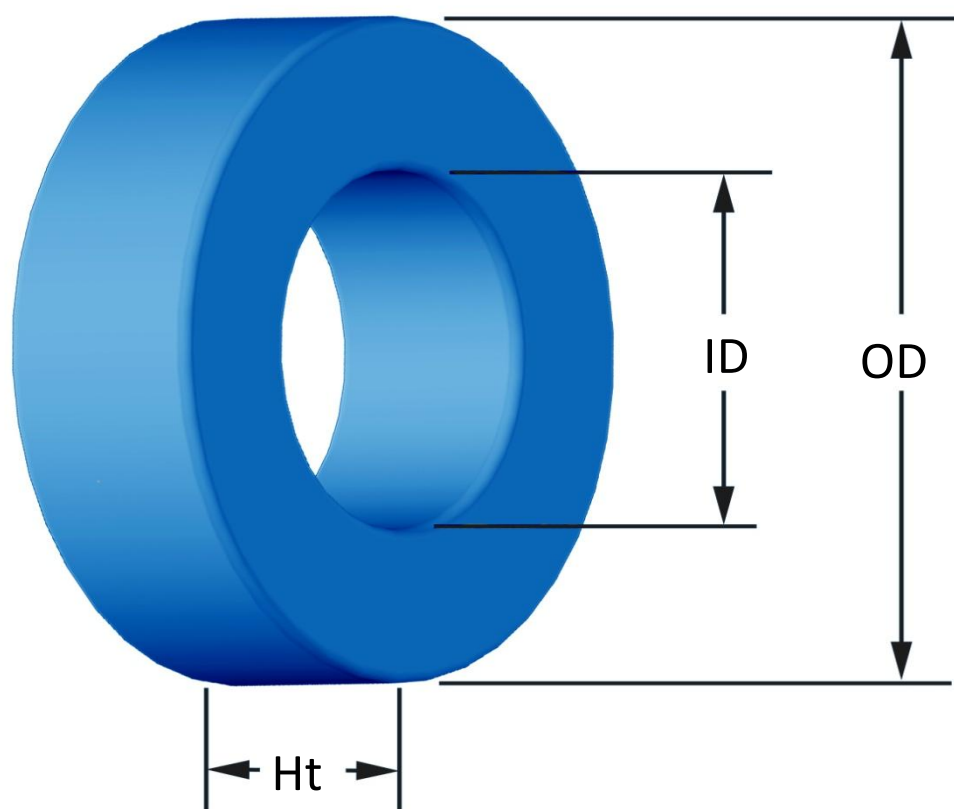




**Part Number:** **FS-350075-2**

Revision 20190529 - Generated 2019-May-29



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

<b>OD</b>	(nom. - bare core) (max.)	88.85 mm 90.00 mm	3.498 in 3.543 in
<b>ID</b>	(nom. - bare core) (min.)	66.01 mm 64.74 mm	2.599 in 2.549 in
<b>HT</b>	(nom. - bare core) (max.)	15.93 mm 17.20 mm	0.627 in 0.677 in
<b>Mass</b>	(approximate)	300 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	1.83 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	24 cm	
	V <sub>e</sub> - Eff. Core Volume	43.9 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	32.9 cm <sup>2</sup>	
	sa - Surface Area	251 cm <sup>2</sup>	
	mlt - mean length per turn	9.20 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	75	
	A <sub>L</sub> value (nominal)	72 nH/N <sup>2</sup>	
	Test Winding	N=100, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.81 V	
	AL tolerance	±8%	
<b>Core Loss</b>	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B <sub>pk</sub> 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 <sub>pk</sub>	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	772 mW/cm <sup>3</sup>	
Core Loss (maximum)	887 mW/cm <sup>3</sup>		
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.000E-02, b=3.486E-06, c=1.682, d=0.000		
	H <sub>DC</sub>	80 Oe	
	Percent Initial Perm(nom.)	64.4%	
Percent Initial Perm(min.)	57.1%		
<b>Coating/Pkg</b>	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	45 Pcs/Box	

<b>Winding Table</b>	<b>Wire Size</b>	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	<b>Single Layer</b>	Turns	52	65	82	103	129	161	201	250	312	389	485
		Rdc(Ω)	9.8 m	19.6 m	39.2 m	78.4 m	156.2 m	310.0 m	615.5 m	1.2	2.4	4.8	9.5
<b>Full Winding</b>	Turns	172	267	413	639	989	1,530	2,369	3,666	5,674	8,782	13,592	
	Rdc(Ω)	32.5 m	80.4 m	197.7 m	486.4 m	1.2	2.9	7.3	17.9	43.9	108.2	266.3	

