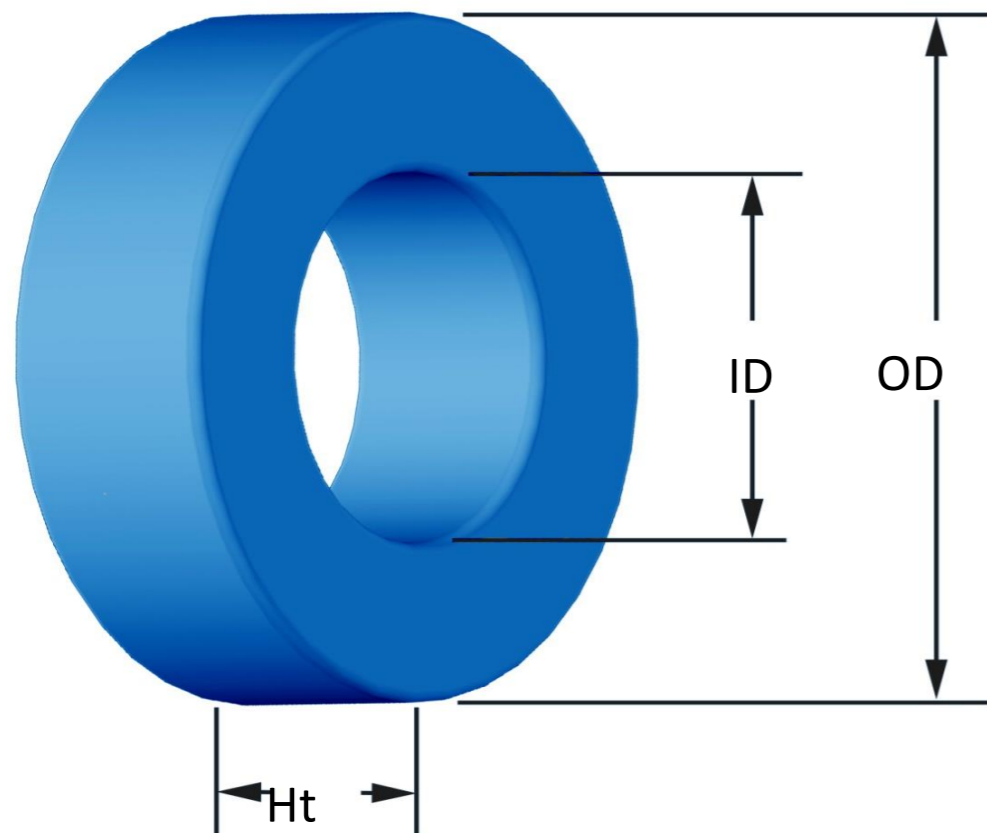




**Part Number:** **FS-250090-2**

Revision 20161018 - Generated 2016-Oct-26



<b>OD</b>	(nom. - bare core) (max. - after coating)	63.50 mm 64.77 mm	2.500 in 2.550 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	31.37 mm 30.48 mm	1.235 in 1.200 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	25.00 mm 25.90 mm	0.984 in 1.020 in
<b>Mass</b>	(approximate)	380 grams	
<b>Magnetic Dimensions</b>	$A_e$ - Eff. Mag. Cross Section $L_e$ - Eff. Mag. Path Length $V_e$ - Eff. Core Volume WA - Min. Eff. Window Area sa - Surface Area mlt - mean length per turn	3.89 cm <sup>2</sup> 14.314 cm 55.8 cm <sup>3</sup> 7.30 cm <sup>2</sup> 150 cm <sup>2</sup> 10.1 cm	
<b>Inductance</b>	$\mu_i$ (reference) $A_L$ value (nominal) Test Winding Frequency Voltage on Agilent 4284A AL tolerance	90 310 nH/N <sup>2</sup> N=100, #18 AWG 10 kHz 1.7 V ±8%	
<b>Core Loss</b>	Core Loss(mW/cm <sup>3</sup> ): $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$ 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>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: $a=1.000E-02$ , $b=8.566E-06$ , $c=1.584$ , $d=0.000$		
<b>Coating/Pkg</b>	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Blue Epoxy 1000 Vrms 0.1 mA, 5 s 27 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	23	29	37	47	59	74	93	116	145	182	227
		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
<b>Full Winding</b>	Turns	38	59	91	142	219	339	525	813	1,258	1,947	3,013	
	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	

