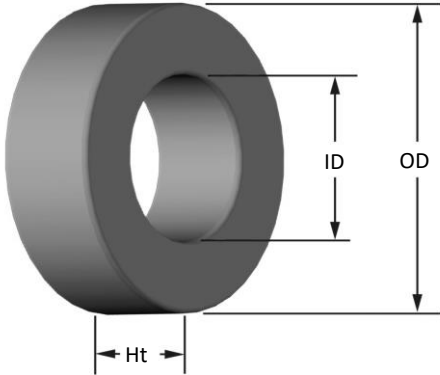




Part Number: **T12-15**

Revision 20200518 - Generated 2020-May-18



OD	(nom. - bare core)	3.18 mm	0.125 in
	(max. - after coating)	3.30 mm	0.130 in
ID	(nom. - bare core)	1.57 mm	0.062 in
	(min. - after coating)	1.45 mm	0.057 in
Ht	(nom. - bare core)	1.27 mm	0.050 in
	(max. - after coating)	1.40 mm	0.055 in
Mass	(approximate)	0.05 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0100 cm ²	
	L _e - Eff. Mag. Path Length	0.750 cm	
	V _e - Eff. Core Volume	0.00770	
	WA - Min. Eff. Window Area	0.0165 cm ²	
	sa - Surface Area	0.395 cm ²	
	mlt - mean length per turn	0.537 cm	
Inductance	μ _i (reference)	25	
	A _L value (nominal)	5 nH/N ²	
	Test Winding	N=25, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.11 V	
	A _L tolerance	±10%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and:		
	a=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15		
	B _{pk}	140 G	
	frequency	100 kHz	
DC Saturation	%μ _i = $\frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	a=1.00E-02, b=1.78E-06, c=1.43, d=0.00		
	H _{DC}	200 Oe	
Coating/Plg	Coating Type:	Parylene C over Red/White	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	250,000 Pcs/Box	

Winding Table	Wire Size	AWG	30	32	34	36	38	40	42	44	#N/A	#N/A	#N/A
		mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A
	Single Layer	Turns	11	14	18	23	30	38	47	60	#N/A	#N/A	#N/A
		Rdc(Ω)	20.0 m	40.5 m	82.8 m	168.3 m	349.0 m	703.1 m	1.4	2.8	#N/A	#N/A	#N/A
Full Winding	Turns	11	16	25	39	60	93	145	224	#N/A	#N/A	#N/A	
	Rdc(Ω)	20.0 m	46.3 m	115.0 m	285.3 m	698.0 m	1.7	4.3	10.5	#N/A	#N/A	#N/A	

