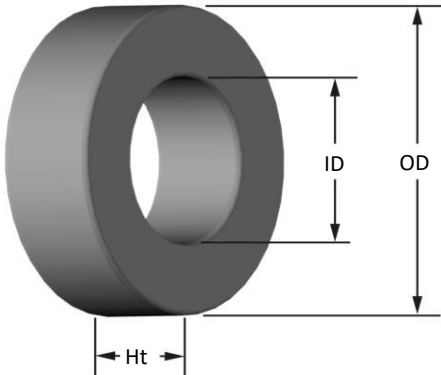




Part Number: **T7-12**
Revision 20200518 - Generated 2020-May-18



OD	(nom. - bare core)	1.78 mm	0.070 in
	(max. - after coating)	1.91 mm	0.075 in
ID	(nom. - bare core)	0.89 mm	0.035 in
	(min. - after coating)	0.76 mm	0.030 in
Ht	(nom. - bare core)	0.76 mm	0.030 in
	(max. - after coating)	0.89 mm	0.035 in
Mass	(approximate)	0.01 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.00350 cm ²	
	L _e - Eff. Mag. Path Length	0.420 cm	
	V _e - Eff. Core Volume	0.00150	
	WA - Min. Eff. Window Area	0.00456 cm ²	
	sa - Surface Area	0.135 cm ²	
	mlt - mean length per turn	0.330 cm	
Inductance	μ _i (reference)	4	
	A _l value (nominal)	0.6 nH/N ²	
	Test Winding	N=10, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.016 V	
	A _l tolerance	±5%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3 + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and:		
	a=4.00E+09, b=3.00E+08, c=2.70E+06, d=4.40E-16		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	18 mW/cm ³	
	Core Loss (maximum)	20 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00		
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
	Percent Initial Perm(min.)	99.4%	
Coating/Plg	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	250,000 Pcs/Box	

Winding Table	Wire Size	AWG	36	38	40	42	44	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
		mm	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	Single Layer	Turns	11	14	18	24	30	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
		Rdc(Ω)	49.5 m	100.1 m	204.7 m	434.1 m	863.0 m	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Full Winding	Turns	11	17	26	40	62	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
	Rdc(Ω)	49.5 m	121.6 m	295.7 m	723.5 m	1.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	

