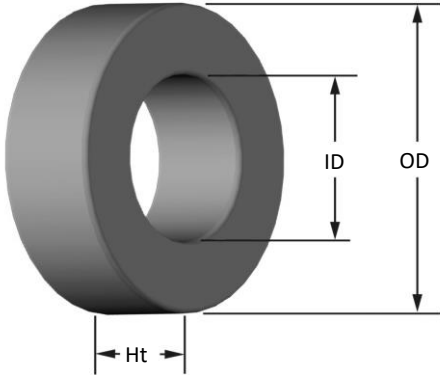




Part Number: **T16-8/90**
Revision 20200518 - Generated 2020-May-18



OD	(nom. - bare core)	4.06 mm	0.160 in
	(max. - after coating)	4.32 mm	0.170 in
ID	(nom. - bare core)	1.98 mm	0.078 in
	(min. - after coating)	1.73 mm	0.068 in
Ht	(nom. - bare core)	1.52 mm	0.060 in
	(max. - after coating)	1.78 mm	0.070 in
Mass	(approximate)	0.09 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0150 cm ²	
	L_e - Eff. Mag. Path Length	0.930 cm	
	V_e - Eff. Core Volume	0.0141 cm ³	
	W_A - Min. Eff. Window Area	0.0234 cm ²	
	s_a - Surface Area	0.658 cm ²	
	mlt - mean length per turn	0.701 cm	
Inductance	μ (reference)	35	
	A_L value (nominal)	6 nH/N ²	
	Test Winding	N=40, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.27 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	
	Core Loss (nominal)	32 mW/cm ³	
Core Loss (maximum)	36 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.00E-02$, $b=3.49E-06$, $c=1.43$, $d=0.00$		
	H_{DC}	200 Oe	
	Percent Initial Perm(nom.)	60.1%	
Percent Initial Perm(min.)	53.7%		
Coating/Plg	Coating Type:	Parylene C over Yellow/Red	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	50,000 Pcs/Box	

Winding Table	Wire Size	AWG	28	30	32	34	36	38	40	42	44	#N/A	#N/A
		mm	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A
	Single Layer	Turns	10	13	17	22	28	36	45	57	72	#N/A	#N/A
		Rdc(Ω)	14.9 m	30.9 m	64.2 m	132.1 m	267.3 m	546.6 m	1.1	2.2	4.4	#N/A	#N/A
Full Winding	Turns	10	15	23	36	56	86	133	206	319	#N/A	#N/A	
	Rdc(Ω)	14.9 m	35.6 m	86.8 m	216.1 m	534.6 m	1.3	3.2	7.9	19.5	#N/A	#N/A	

