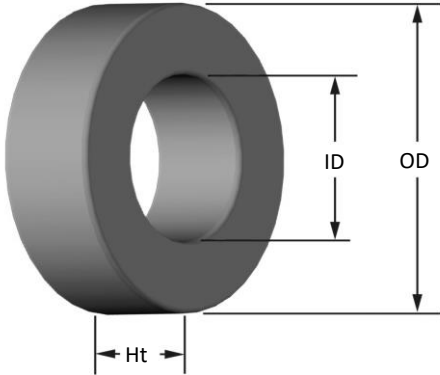




Part Number: **T20-8/90**
Revision 20200518 - Generated 2020-May-18



OD	(nom. - bare core)	5.08 mm	0.200 in
	(max. - after coating)	5.33 mm	0.210 in
ID	(nom. - bare core)	2.24 mm	0.088 in
	(min. - after coating)	1.98 mm	0.078 in
Ht	(nom. - bare core)	1.78 mm	0.070 in
	(max. - after coating)	2.03 mm	0.080 in
Mass	(approximate)	0.17 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0230 cm ²	
	L_e - Eff. Mag. Path Length	1.15 cm	
	V_e - Eff. Core Volume	0.0260 cm ³	
	W_A - Min. Eff. Window Area	0.0308 cm ²	
	s_a - Surface Area	0.962 cm ²	
	mlt - mean length per turn	0.841 cm	
Inductance	μ (reference)	35	
	A_L value (nominal)	7.8 nH/N ²	
	Test Winding	N=50, #36 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.005 V	
	A_L tolerance	±10%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3 + B_{pk}^{2.3} + B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	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	100,000 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	12	16	20	26	33	42	52	66	83	#N/A	#N/A
		Rdc(Ω)	21.5 m	45.5 m	90.5 m	187.2 m	377.8 m	764.7 m	1.5	3.0	6.1	#N/A	#N/A
Full Winding	Turns	13	20	30	47	73	113	175	271	419	#N/A	#N/A	
	Rdc(Ω)	23.3 m	56.9 m	135.8 m	338.3 m	835.7 m	2.1	5.1	12.5	30.7	#N/A	#N/A	

