



Part Number: **T44-8/90**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	11.18 mm 11.68 mm	0.440 in 0.460 in
ID	(nom. - bare core) (min. - after coating)	5.82 mm 5.31 mm	0.229 in 0.209 in
Ht	(nom. - bare core) (max. - after coating)	4.04 mm 4.55 mm	0.159 in 0.179 in
Mass	(approximate)	1.7 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0990 cm ²	
	L _e - Eff. Mag. Path Length	2.68 cm	
	V _e - Eff. Core Volume	0.266 cm ³	
	WA - Min. Eff. Window Area	0.221 cm ²	
	sa - Surface Area	4.81 cm ²	
	mlt - mean length per turn	1.81 cm	
Inductance	μ _i (reference)	35	
	A _L value (nominal)	18 nH/N ²	
	Test Winding	N=100, #34 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.044 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/Pkg	Coating Type:	Yellow/Red Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	10,000 Pcs/Box	

Winding Table	Wire Size	AWG	18	20	22	24	26	28	30	32	34	36	38
		mm	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100
	Single Layer	Turns	11	14	18	23	29	37	47	59	74	93	116
		Rdc(Ω)	4.2 m	8.4 m	17.3 m	35.1 m	70.3 m	142.7 m	288.3 m	575.7 m	1.1	2.3	4.6
Full Winding	Turns	10	16	25	38	59	91	141	219	339	524	812	
	Rdc(Ω)	3.8 m	9.6 m	24.0 m	58.0 m	143.1 m	351.0 m	865.0 m	2.1	5.3	12.9	31.9	

