



Part Number: **T25-8/90**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	6.48 mm 6.86 mm	0.255 in 0.270 in
ID	(nom. - bare core) (min. - after coating)	3.05 mm 2.67 mm	0.120 in 0.105 in
Ht	(nom. - bare core) (max. - after coating)	2.44 mm 2.95 mm	0.096 in 0.116 in
Mass	(approximate)	0.36 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0370 cm ²	
	L _e - Eff. Mag. Path Length	1.50 cm	
	V _e - Eff. Core Volume	0.0550 cm ³	
	WA - Min. Eff. Window Area	0.0559 cm ²	
	sa - Surface Area	1.68 cm ²	
	mlt - mean length per turn	1.14 cm	
Inductance	μ _i (reference)	35	
	A _L value (nominal)	10 nH/N ²	
	Test Winding	N=50, #34 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.008 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	20,000 Pcs/Box	

Winding Table	Wire Size	AWG	24	26	28	30	32	34	36	38	40	42	44
		mm	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050
	Single Layer	Turns	10	13	17	22	28	36	45	57	72	90	112
		Rdc(Ω)	9.6 m	19.9 m	41.3 m	85.0 m	172.1 m	351.9 m	699.6 m	1.4	2.8	5.6	11.1
Full Winding	Turns	10	15	23	36	55	86	132	205	317	491	760	
	Rdc(Ω)	9.6 m	22.9 m	55.9 m	139.1 m	338.1 m	840.7 m	2.1	5.1	12.5	30.7	75.6	

