



Part Number: **T44-40**

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)	1.8 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section L_e - Eff. Mag. Path Length V_e - Eff. Core Volume W_A - Min. Eff. Window Area s_a - Surface Area mlt - mean length per turn	0.0990 cm ² 2.68 cm 0.266 cm ³ 0.221 cm ² 4.81 cm ² 1.81 cm	
Inductance	μ_i (reference) A_L value (nominal) Test Winding Frequency Voltage on Agilent 4284A A_L tolerance	60 31 nH/N ² N=100, #34 AWG 10 kHz 0.044 V ±10%	
Core Loss	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$ where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.10E+09$, $b=3.30E+07$, $c=2.50E+06$, $d=3.10E-13$	Bpk frequency Core Loss (nominal) Core Loss (maximum)	140 G 100 kHz 127 mW/cm ³ 146 mW/cm ³
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: $a=1.00E-02$, $b=8.93E-06$, $c=1.61$, $d=0.00$	H_{DC} Percent Initial Perm(nom.) Percent Initial Perm(min.)	50 Oe 67.0% 60.2%
Coating/Pkg	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Green/Yellow Epoxy Paint 500 Vrms, 60Hz 3 mA, 5 s 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
	Full Winding	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
	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	

