



Part Number: **T16-10**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	4.06 mm 4.32 mm	0.160 in 0.170 in
ID	(nom. - bare core) (min. - after coating)	1.98 mm 1.73 mm	0.078 in 0.068 in
Ht	(nom. - bare core) (max. - after coating)	1.52 mm 1.78 mm	0.060 in 0.070 in
Mass	(approximate)	0.07 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section L_e - Eff. Mag. Path Length V_e - Eff. Core Volume WA - Min. Eff. Window Area sa - Surface Area mlt - mean length per turn	0.0150 cm ² 0.930 cm 0.0141 cm ³ 0.0234 cm ² 0.658 cm ² 0.701 cm	
Inductance	μ_i (reference) A_L value (nominal) Test Winding Frequency Voltage on Agilent 4284A A_L tolerance	6 1.3 nH/N ² N=40, #36 AWG 1 MHz 0.27 V ±5%	
Core Loss & Q	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: $a=4.00E+09$, $b=3.00E+08$, $c=2.70E+06$, $d=8.00E-16$ Q test winding Q frequency Q min on HP4342A	N=15, #30 AWG 25 MHz 95	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: $a=1.00E-02$, $b=5.54E-09$, $c=1.69$, $d=0.00$ H_{DC} Percent Initial Perm(nom.) Percent Initial Perm(min.)	200 Oe 99.6% 99.4%	
Coating/Pkg	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Parylene C 500 Vrms, 60Hz 3 mA, 5 s 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	

