



Part Number: **T68-17E**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	17.53 mm 18.03 mm	0.690 in 0.710 in
ID	(nom. - bare core) (min. - after coating)	9.40 mm 8.89 mm	0.370 in 0.350 in
Ht	(nom. - bare core) (max. - after coating)	12.70 mm 13.21 mm	0.500 in 0.520 in
Mass	(approximate)	9.9 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.490 cm ²	
	L _e - Eff. Mag. Path Length	4.23 cm	
	V _e - Eff. Core Volume	2.07 cm ³	
	WA - Min. Eff. Window Area	0.621 cm ²	
	sa - Surface Area	15.6 cm ²	
Inductance	μ _i (reference)	4	
	A _L value (nominal)	5.7 nH/N ²	
	Test Winding	N=100, #30 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	1.0 V	
Core Loss & Q	A _L tolerance	±5%	
	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=4.40E-16	
	Q test winding	N=6, #24 AWG	
	Q frequency	0 kHz	
DC Saturation	Q min on HP4342A	156	
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00	
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
Coating/Pkg	Percent Initial Perm(min.)	99.4%	
	Coating Type:	Blue/Yellow Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
Winding Table	Package Quantity	1,250 Pcs/Box	
	Wire Size	AWG	14 16 18 20 22 24 26 28 30 32 34
Single Layer	mm	1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315 0.250 0.200 0.160	
	Turns	12 15 20 25 32 40 51 64 80 101 126	
Full Winding	Rdc(Ω)	4.0 m 7.9 m 16.7 m 33.3 m 67.7 m 134.7 m 273.1 m 545.0 m 1.1 2.2 4.3	
	Turns	12 19 29 45 69 107 166 256 397 614 950	
Full Winding	Rdc(Ω)	4.0 m 10.0 m 24.3 m 59.9 m 146.1 m 360.2 m 888.8 m 2.2 5.4 13.2 32.5	

