



Part Number: **T68-3**

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)	4.83 mm 5.33 mm	0.190 in 0.210 in
Mass	(approximate)	4.9 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.179 cm ²	
	L _e - Eff. Mag. Path Length	4.23 cm	
	V _e - Eff. Core Volume	0.759 cm ³	
	WA - Min. Eff. Window Area	0.621 cm ²	
	sa - Surface Area	10.6 cm ²	
	mlt - mean length per turn	2.43 cm	
Inductance	μ _i (reference)	35	
	A _L value (nominal)	19.5 nH/N ²	
	Test Winding	N=100, #30 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.079 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=4.30E-15		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	31 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:	Gray/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	3,000 Pcs/Box	

Winding Table	Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
		mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
	Single Layer	Turns	12	15	20	25	32	40	51	64	80	101	126
		Rdc(Ω)	2.4 m	4.8 m	10.1 m	20.2 m	41.1 m	81.7 m	165.6 m	330.4 m	656.9 m	1.3	2.6
Full Winding	Turns	12	19	29	45	69	107	166	256	397	614	950	
	Rdc(Ω)	2.4 m	6.1 m	14.7 m	36.3 m	88.6 m	218.4 m	538.9 m	1.3	3.3	8.0	19.7	

