



Part Number: **T650-66**

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OD	(nom. - bare core) (max. - after coating)	165.10 mm 166.37 mm	6.500 in 6.550 in
ID	(nom. - bare core) (min. - after coating)	88.90 mm 87.63 mm	3.500 in 3.450 in
Ht	(nom. - bare core) (max. - after coating)	50.80 mm 52.07 mm	2.000 in 2.050 in
Mass	(approximate)	4,550 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	18.4 cm ²	
	L _e - Eff. Mag. Path Length	39.9 cm	
	V _e - Eff. Core Volume	734 cm ³	
	WA - Min. Eff. Window Area	60.3 cm ²	
	sa - Surface Area	927 cm ²	
	mlt - mean length per turn	22.7 cm	
Inductance	μ _i (reference)	66	
	A _L value (nominal)	380 nH/N ²	
	Test Winding	N=100, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	5.0 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=1.72E+10, b=4.96E+07, c=1.23E+06, d=1.73E-14		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	17 mW/cm ³	
Core Loss (maximum)	20 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=1.23E-05, c=1.48, d=0.00		
	H _{DC}	50 Oe	
	Percent Initial Perm(nom.)	71.0%	
Percent Initial Perm(min.)	65.1%		
Coating/Pkg	Coating Type:	Brown/Brown Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	2 Pcs/Box	

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	71	90	112	140	175	219	273	340	423	527	657
		Rdc(Ω)	33.1 m	66.7 m	132.0 m	262.5 m	521.8 m	1.0	2.1	4.1	8.1	16.0	31.7
Full Winding	Turns	316	489	756	1,170	1,812	2,804	4,340	6,717	10,396	16,090	24,903	
	Rdc(Ω)	147.3 m	362.5 m	891.3 m	2.2	5.4	13.3	32.7	80.6	198.3	488.2	1.2 k	

