



Part Number: **T72-52**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	18.29 mm 18.80 mm	0.720 in 0.740 in
ID	(nom. - bare core) (min. - after coating)	7.11 mm 6.60 mm	0.280 in 0.260 in
Ht	(nom. - bare core) (max. - after coating)	6.60 mm 7.11 mm	0.260 in 0.280 in
Mass	(approximate)	9.8 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.349 cm ²	
	L _e - Eff. Mag. Path Length	4.01 cm	
	V _e - Eff. Core Volume	1.40 cm ³	
	WA - Min. Eff. Window Area	0.343 cm ²	
	sa - Surface Area	11.8 cm ²	
Inductance	μ _i (reference)	75	
	A _L value (nominal)	82 nH/N ²	
Core Loss	Test Winding	N=50, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.077 V	
	A _L tolerance	±10%	
	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=1.00E+09, b=1.10E+08, c=2.10E+06, d=6.90E-14	
Bpk	140 G		
frequency	100 kHz		
Core Loss (nominal)	58 mW/cm ³		
Core Loss (maximum)	67 mW/cm ³		
DC Saturation	%μ _i = $\frac{1}{a + b \cdot H^c} + d$	where H expressed in oersteds, and: a=1.00E-02, b=4.66E-06, c=1.84, d=0.00	
	H _{DC}	50 Oe	
	Percent Initial Perm(nom.)	61.6%	
	Percent Initial Perm(min.)	53.4%	
Coating/Pkg	Coating Type:	Green/Blue Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	2,000 Pcs/Box	

Winding Table	Wire Size	AWG	16	18	20	22	24	26	28	30	32	34	36
		mm	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125
	Single Layer	Turns	11	14	18	23	29	37	47	59	74	93	116
		Rdc(Ω)	4.3 m	8.7 m	17.8 m	36.2 m	72.5 m	147.2 m	297.3 m	593.5 m	1.2	2.4	4.7
Full Winding	Turns	10	16	25	38	59	91	141	219	339	524	812	
	Rdc(Ω)	3.9 m	9.9 m	24.7 m	59.8 m	147.6 m	361.9 m	891.9 m	2.2	5.4	13.3	32.9	

