



Part Number: **T72-40**

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)	9.7 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)	60											
	A _L value (nominal)	71 nH/N ²											
	Test Winding	N=50, #28 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.077 V											
Core Loss	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=1.10E+09, b=3.30E+07, c=2.50E+06, d=3.10E-13											
	B _{pk}	140 G											
	frequency	100 kHz											
DC Saturation	Core Loss (nominal)	127 mW/cm ³											
	Core Loss (maximum)	146 mW/cm ³											
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.00E-02, b=8.93E-06, c=1.61, d=0.00											
Coating/Pkg	H _{DC}	50 Oe											
	Percent Initial Perm(nom.)	67.0%											
	Percent Initial Perm(min.)	60.2%											
	Coating Type:	Green/Yellow Epoxy Paint											
Winding Table	Voltage Breakdown (min.)	500 Vrms, 60Hz											
	Limit	3 mA, 5 s											
	Package Quantity	2,000 Pcs/Box											
	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	

