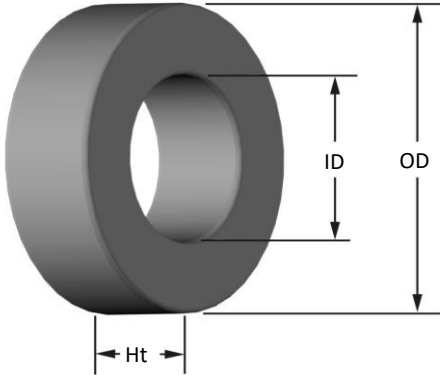




Part Number: **T14-52A**
Revision 20200518 - Generated 2020-May-18



OD	(nom. - bare core)	3.43 mm	0.135 in
	(max. - after coating)	3.68 mm	0.145 in
ID	(nom. - bare core)	1.70 mm	0.067 in
	(min. - after coating)	1.45 mm	0.057 in
Ht	(nom. - bare core)	1.52 mm	0.060 in
	(max. - after coating)	1.78 mm	0.070 in
Mass	(approximate)	0.07 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0120 cm ²	
	L_e - Eff. Mag. Path Length	0.810 cm	
	V_e - Eff. Core Volume	0.00980	
	W_A - Min. Eff. Window Area	0.0165 cm ²	
	s_a - Surface Area	0.510 cm ²	
	mlt - mean length per turn	0.652 cm	
Inductance	μ_i (reference)	75	
	A_L value (nominal)	11.5 nH/N ²	
	Test Winding	N=30, #36 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.002 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: $a=1.00E+09$, $b=1.10E+08$, $c=2.10E+06$, $d=6.90E-14$		
	B_{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	58 mW/cm ³	
Core Loss (maximum)	67 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.00E-02$, $b=4.66E-06$, $c=1.84$, $d=0.00$		
	H_{DC}	50 Oe	
	Percent Initial Perm(nom.)	61.6%	
	Percent Initial Perm(min.)	53.4%	
Coating/Plg	Coating Type:	Parylene C over Green/Blue	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	250,000 Pcs/Box	

Winding Table	Wire Size	AWG	30	32	34	36	38	40	42	44	#N/A	#N/A	#N/A
		mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A
	Single Layer	Turns	11	14	18	23	30	38	47	60	#N/A	#N/A	#N/A
		Rdc(Ω)	24.3 m	49.1 m	100.4 m	204.0 m	423.3 m	852.7 m	1.7	3.4	#N/A	#N/A	#N/A
Full Winding	Turns	11	16	25	39	60	93	145	224	#N/A	#N/A	#N/A	
	Rdc(Ω)	24.3 m	56.1 m	139.5 m	346.0 m	846.6 m	2.1	5.2	12.7	#N/A	#N/A	#N/A	

