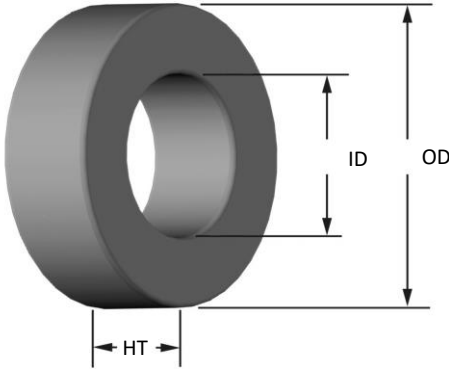




Part Number: **T50-2B**
 Revision 2022-May-13 - Generated 2025-Apr-1



OD	(nom. - bare core)	12.70 mm	0.500 in										
	(max. - including coating, if any)	13.21 mm	0.520 in										
ID	(nom. - bare core)	7.70 mm	0.303 in										
	(min. - including coating, if any)	7.19 mm	0.283 in										
HT	(nom. - bare core)	6.35 mm	0.250 in										
	(max. - including coating, if any)	6.86 mm	0.270 in										
Mass	(approximate)	2.4 grams											
Magnetic Dimensions	Ae - Eff. Mag. Cross Section	0.148 cm ²											
	Le - Eff. Mag. Path Length	3.19 cm											
	Ve - Eff. Core Volume	0.471 cm ³											
	WA - Min. Eff. Window Area	0.406 cm ²											
	sa - Surface Area	7.16 cm ²											
	mlt - mean length per turn	2.33 cm											
	μ (reference)	10											
Inductance	AL value (nominal)	6.1 nH/N ²											
	Test Winding	N=100, #32 AWG											
	Test Frequency	1 MHz											
	Voltage on Agilent 4284A	1.0 V											
	AL tolerance	±5%											
Core Loss & Q	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$												
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=4.00E+09$, $b=3.00E+08$, $c=2.70E+06$, $d=9.60E-16$												
	Q test winding	N=100, #32 AWG											
	Q frequency	1.6 MHz											
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: $a=1.00E-02$, $b=1.83E-07$, $c=1.46$, $d=0.00$												
	Hdc	200 Oe											
Coating/Pkg	Coating Type:	Red/Clear Epoxy Paint											
	Voltage Breakdown (min.)	500 Vrms, 60Hz											
	Limit	3 mA, 5 s											
	Package Quantity	5,000 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	12	15	20	25	32	41	51	64	81	101	127
		Rdc(Ω)	3.7 m	7.3 m	15.5 m	30.9 m	62.8 m	128.0 m	253.3 m	505.4 m	1.0	2.0	4.0
	Full Winding	Turns	12	19	29	45	70	108	168	259	401	621	962
		Rdc(Ω)	3.7 m	9.3 m	22.5 m	55.6 m	137.4 m	337.2 m	834.3 m	2.0	5.0	12.4	30.6

