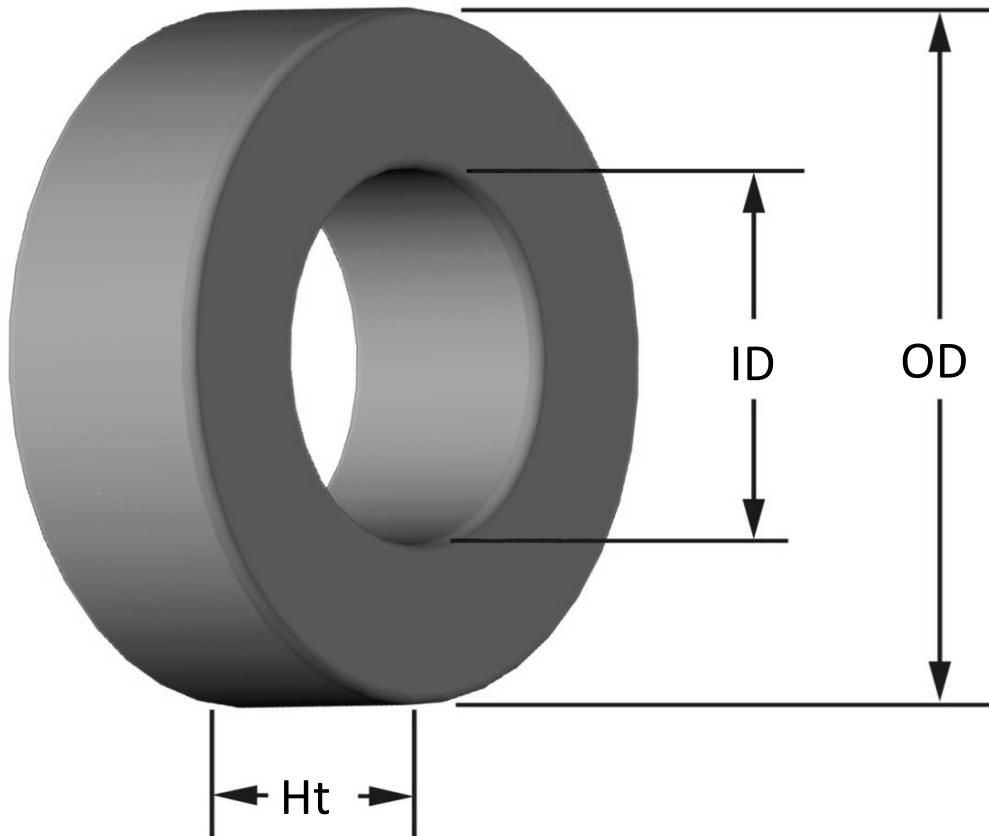




Part Number:

T45-63B

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core)	11.18 mm	0.440 in
	(max. - after coating)	11.68 mm	0.460 in
ID	(nom. - bare core)	6.22 mm	0.245 in
	(min. - after coating)	5.72 mm	0.225 in
Ht	(nom. - bare core)	4.98 mm	0.196 in
	(max. - after coating)	5.49 mm	0.216 in
Mass	(approximate)	1.9 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.117 cm ²	
	L _e - Eff. Mag. Path Length	2.73 cm	
	V _e - Eff. Core Volume	0.320 cm ³	
	WA - Min. Eff. Window Area	0.257 cm ²	
	sa - Surface Area	5.26 cm ²	
	mlt - mean length per turn	1.98 cm	
Inductance	μ _i (reference)	35	
	A _L value (nominal)	18 nH/N ²	
	Test Winding	N=100, #34 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.052 V	
	A _L tolerance	±10%	
Core Loss	$\text{Core Loss(mW/cm}^3\text{)}= \frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=9.94E+08$, $b=2.56E+08$, $c=1.00E+04$, $d=3.34E-15$		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	31 mW/cm ³	
	Core Loss (maximum)	35 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.00E-02$, $b=1.29E-05$, $c=1.24$, $d=0.00$		
	H _{DC}	200 Oe	
	Percent Initial Perm(nom.)	51.7%	
	Percent Initial Perm(min.)	46.1%	
Coating/Pkg	Coating Type:	Brown/Beige Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	6,000 Pcs/Box	

Winding Table	Wire Size	AWG	18	20	22	24	26	28	30	32	34	36	38
		mm	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100
	Single Layer	Turns	12	15	20	25	32	40	51	64	80	100	125
		Rdc(Ω)	5.0 m	9.9 m	21.0 m	41.7 m	84.8 m	168.6 m	341.8 m	682.2 m	1.4	2.7	5.4
	Full Winding	Turns	12	18	29	44	68	106	164	254	393	608	941
		Rdc(Ω)	5.0 m	11.9 m	30.4 m	73.3 m	180.2 m	446.7 m	1.1	2.7	6.7	16.4	40.3

