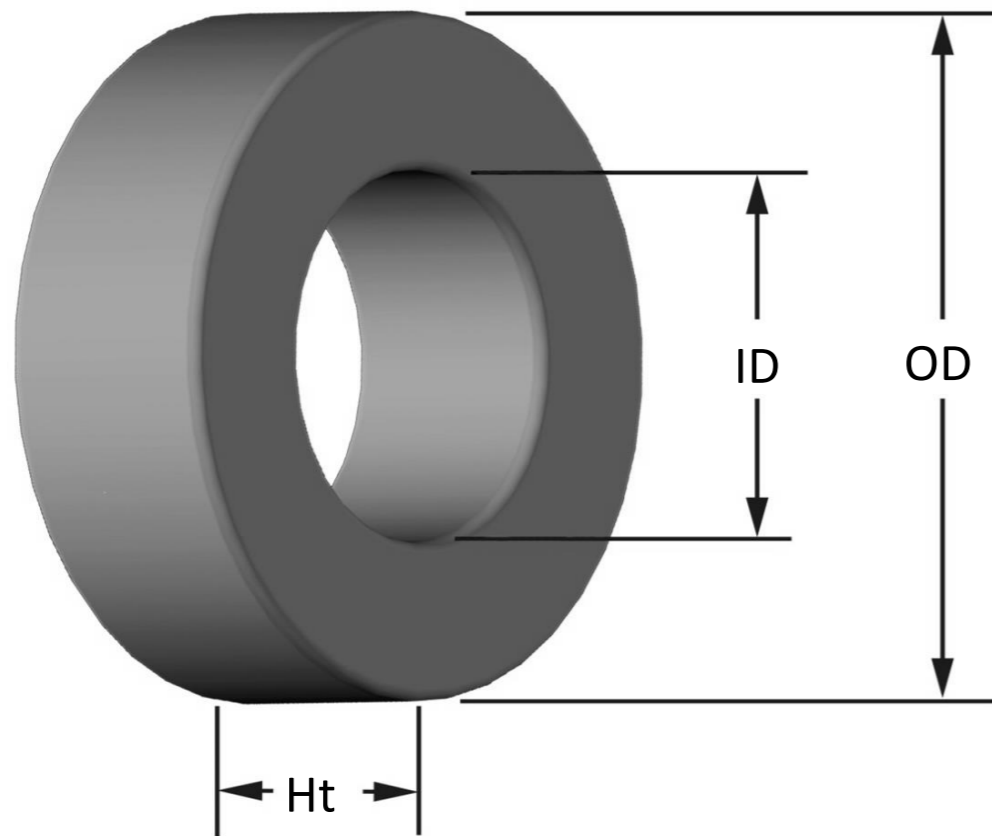




Part Number: **T37-19**
Revision 20160713 - Generated 2016-Aug-15



OD	(nom. - bare core) (max. - after coating)	9.53 mm 9.91 mm	0.375 in 0.390 in
ID	(nom. - bare core) (min. - after coating)	5.21 mm 4.83 mm	0.205 in 0.190 in
Ht	(nom. - bare core) (max. - after coating)	3.25 mm 3.76 mm	0.128 in 0.148 in
Mass	(approximate)	1.00 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0640 cm ²	
	L _e - Eff. Mag. Path Length	2.31 cm	
	V _e - Eff. Core Volume	0.147 cm ³	
	WA - Min. Eff. Window Area	0.183 cm ²	
	sa - Surface Area	3.47 cm ²	
	mlt - mean length per turn	1.50 cm	
Inductance	μ _i (reference)	55	
	A _L value (nominal)	19 nH/N ²	
	Test Winding	N=50, #30 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.014 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=1.90E+09, b=8.40E+07, c=2.10E+06, d=5.00E-14		
	B _{pk}	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	54 mW/cm ³	
Core Loss (maximum)	62 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=3.60E-06, c=1.69, d=0.00		
	H _{DC}	100 Oe	
	Percent Initial Perm (nom.)	53.8%	
Percent Initial Perm (min.)	46.2%		
Coating/Pkg	Coating Type:	Red/Green Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	0.1 mA, 5 s	
	Package Quantity	20,000 Pcs/Box	

Winding Table	Wire Size	AWG	20	22	24	26	28	30	32	34	36	38	40
		mm	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080
	Single Layer	Turns	12	16	21	26	34	42	53	67	84	105	132
		Rdc(Ω)	6.0 m	12.7 m	26.5 m	52.2 m	108.6 m	213.4 m	428.3 m	861.2 m	1.7	3.4	6.8
Full Winding	Turns	13	20	32	49	76	117	181	280	433	671	1,038	
	Rdc(Ω)	6.5 m	15.9 m	40.4 m	98.4 m	242.8 m	594.5 m	1.5	3.6	8.9	21.8	53.7	

