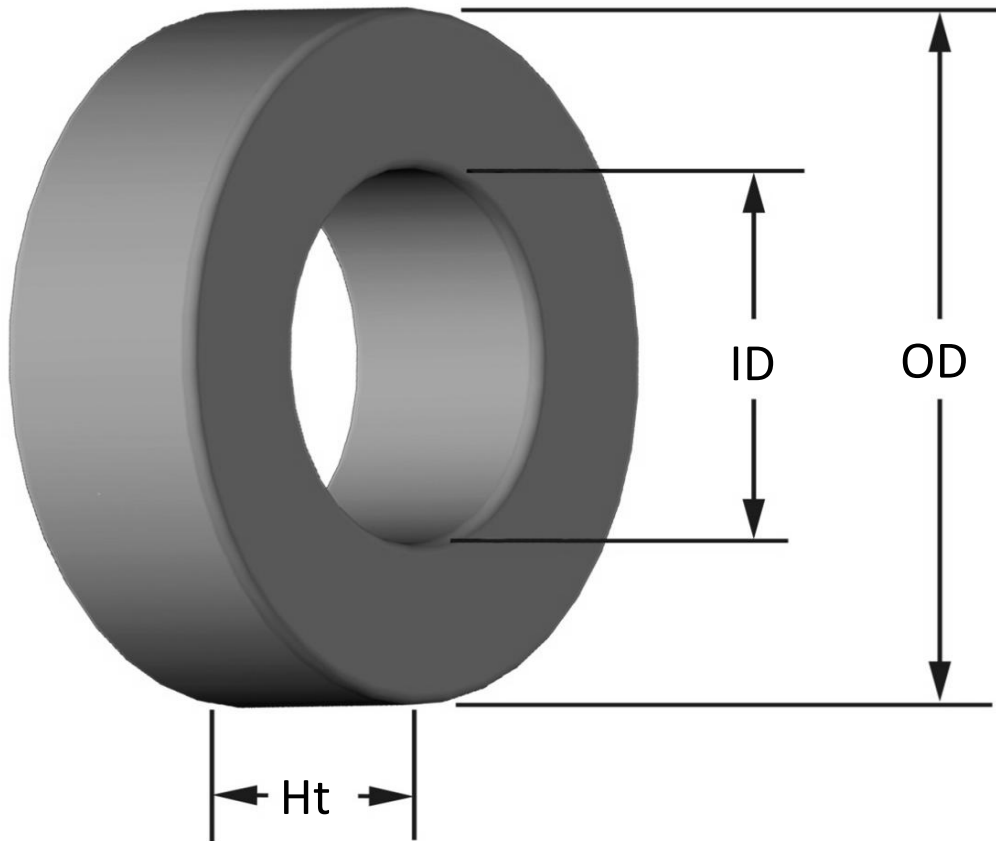




Part Number: **T30-40**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core)	7.80 mm	0.307 in
	(max. - after coating)	8.18 mm	0.322 in
ID	(nom. - bare core)	3.84 mm	0.151 in
	(min. - after coating)	3.45 mm	0.136 in
Ht	(nom. - bare core)	3.25 mm	0.128 in
	(max. - after coating)	3.76 mm	0.148 in
Mass	(approximate)	0.76 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0600 cm ²	
	L _e - Eff. Mag. Path Length	1.84 cm	
	V _e - Eff. Core Volume	0.110 cm ³	
	WA - Min. Eff. Window Area	0.0937 cm ²	
	sa - Surface Area	2.49 cm ²	
	mlt - mean length per turn	1.40 cm	
Inductance	μ _i (reference)	60	
	A _L value (nominal)	28 nH/N ²	
	Test Winding	N=50, #33 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.013 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: $a=1.10E+09$, $b=3.30E+07$, $c=2.50E+06$, $d=3.10E-13$		
	Bpk	140 G	
	frequency	100 kHz	
	Core Loss (nominal)	127 mW/cm ³	
	Core Loss (maximum)	146 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.00E-02$, $b=8.93E-06$, $c=1.61$, $d=0.00$		
	H _{DC}	50 Oe	
	Percent Initial Perm(nom.)	67.0%	
	Percent Initial Perm(min.)	60.2%	
Coating/Pkg	Coating Type:	Green/Yellow Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	25,000 Pcs/Box	

Winding Table	Wire Size	AWG	22	24	26	28	30	32	34	36	38	40	42
		mm	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063
	Single Layer	Turns	11	14	18	23	30	37	47	59	75	94	117
		Rdc(Ω)	8.1 m	16.5 m	33.7 m	68.4 m	141.9 m	278.3 m	562.2 m	1.1	2.3	4.5	9.0
	Full Winding	Turns	10	16	25	39	60	93	143	222	344	532	823
		Rdc(Ω)	7.4 m	18.8 m	46.7 m	116.0 m	283.7 m	699.5 m	1.7	4.2	10.4	25.6	63.0

