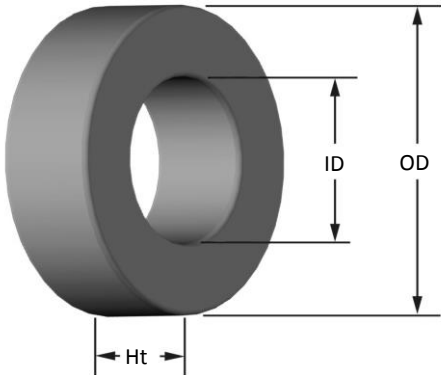




**Part Number:** **T12-2**  
Revision 20190404 - Generated 2019-Apr-04



<b>OD</b>	(nom. - bare core)	3.18 mm	0.125 in
	(max. - after coating)	3.30 mm	0.130 in
<b>ID</b>	(nom. - bare core)	1.57 mm	0.062 in
	(min. - after coating)	1.45 mm	0.057 in
<b>Ht</b>	(nom. - bare core)	1.27 mm	0.050 in
	(max. - after coating)	1.40 mm	0.055 in
<b>Mass</b>	(approximate)	0.04 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0100 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	0.750 cm	
	V <sub>e</sub> - Eff. Core Volume	0.00770	
	WA - Min. Eff. Window Area	0.0165 cm <sup>2</sup>	
	sa - Surface Area	0.395 cm <sup>2</sup>	
	mlt - mean length per turn	0.537 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	10	
	A <sub>L</sub> value (nominal)	2 nH/N <sup>2</sup>	
	Test Winding	N=25, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.11 V	
	A <sub>L</sub> tolerance	±5%	
<b>Core Loss &amp; Q</b>	Core Loss(mW/cm <sup>3</sup> )= $\frac{f}{Bpk^3 + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
	where B <sub>pk</sub> 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=25, #36 AWG	
	Q frequency	12 MHz	
	Q min on HP4342A	88	
<b>DC Saturation</b>	%μ <sub>i</sub> = $\frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.00E-02, b=1.83E-07, c=1.46, d=0.00		
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	95.9%	
	Percent Initial Perm(min.)	94.8%	
<b>Coating/Plg</b>	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	250,000 Pcs/Box	

<b>Winding Table</b>	<b>Wire Size</b>	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
	<b>Single Layer</b>	Turns	11	14	18	23	30	38	47	60	#N/A	#N/A	#N/A
		Rdc(Ω)	20.0 m	40.5 m	82.8 m	168.3 m	349.0 m	703.1 m	1.4	2.8	#N/A	#N/A	#N/A
<b>Full Winding</b>	Turns	11	16	25	39	60	93	145	224	#N/A	#N/A	#N/A	
	Rdc(Ω)	20.0 m	46.3 m	115.0 m	285.3 m	698.0 m	1.7	4.3	10.5	#N/A	#N/A	#N/A	

