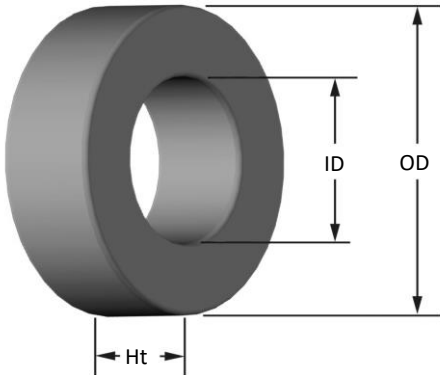




**Part Number:** **T7-10**  
Revision 20200518 - Generated 2020-May-18



<b>OD</b>	(nom. - bare core)	1.78 mm	0.070 in
	(max. - after coating)	1.91 mm	0.075 in
<b>ID</b>	(nom. - bare core)	0.89 mm	0.035 in
	(min. - after coating)	0.76 mm	0.030 in
<b>Ht</b>	(nom. - bare core)	0.76 mm	0.030 in
	(max. - after coating)	0.89 mm	0.035 in
<b>Mass</b>	(approximate)	0.01 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.00350 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	0.420 cm	
	V <sub>e</sub> - Eff. Core Volume	0.00150	
	WA - Min. Eff. Window Area	0.00456 cm <sup>2</sup>	
	sa - Surface Area	0.135 cm <sup>2</sup>	
	mlt - mean length per turn	0.330 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	6	
	A <sub>i</sub> value (nominal)	0.9 nH/N <sup>2</sup>	
	Test Winding	N=10, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.016 V	
	A <sub>i</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=8.00E-16		
	Q test winding	N=10, #36 AWG	
	Q frequency	60 MHz	
	Q min on HP4342A	47	
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.00E-02, b=5.54E-09, c=1.69, d=0.00		
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	99.6%	
	Percent Initial Perm(min.)	99.4%	
<b>Coating/Plig</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	36	38	40	42	44	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
		mm	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
	<b>Single Layer</b>	Turns	11	14	18	24	30	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
		Rdc(Ω)	49.5 m	100.1 m	204.7 m	434.1 m	863.0 m	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
<b>Full Winding</b>	Turns	11	17	26	40	62	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	
	Rdc(Ω)	49.5 m	121.6 m	295.7 m	723.5 m	1.8	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	

