



**Part Number:** **T16-7**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	4.06 mm 4.32 mm	0.160 in 0.170 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	1.98 mm 1.73 mm	0.078 in 0.068 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	1.52 mm 1.78 mm	0.060 in 0.070 in
<b>Mass</b>	(approximate)	0.07 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0150 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	0.930 cm	
	V <sub>e</sub> - Eff. Core Volume	0.0141 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	0.0234 cm <sup>2</sup>	
	sa - Surface Area	0.658 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	9	
	A <sub>L</sub> value (nominal)	1.9 nH/N <sup>2</sup>	
	Test Winding	N=40, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.27 V	
<b>Core Loss &amp; Q</b>	A <sub>L</sub> tolerance	±5%	
	Core Loss(mW/cm <sup>3</sup> )= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$ where B <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		
<b>DC Saturation</b>	Q test winding	N=40, #36 AWG	
	Q frequency	0 kHz	
	Q min on HP4342A	95	
	%μ <sub>i</sub> = $\frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: a=1.00E-02, b=1.48E-07, c=1.46, d=0.00		
<b>Coating/Pkg</b>	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	96.7%	
	Percent Initial Perm(min.)	95.7%	
	Coating Type:	Parylene C	
<b>Winding Table</b>	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	50,000 Pcs/Box	

<b>Winding Table</b>	<b>Wire Size</b>	AWG	28	30	32	34	36	38	40	42	44	#N/A	#N/A
		mm	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A
	<b>Single Layer</b>	Turns	10	13	17	22	28	36	45	57	72	#N/A	#N/A
		Rdc(Ω)	14.9 m	30.9 m	64.2 m	132.1 m	267.3 m	546.6 m	1.1	2.2	4.4	#N/A	#N/A
<b>Full Winding</b>	Turns	10	15	23	36	56	86	133	206	319	#N/A	#N/A	
	Rdc(Ω)	14.9 m	35.6 m	86.8 m	216.1 m	534.6 m	1.3	3.2	7.9	19.5	#N/A	#N/A	

