



**Part Number:** **T16-17**

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)	4	
	A <sub>L</sub> value (nominal)	0.8 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=4.40E-16	
	Q test winding	N=10, #28 AWG	
	Q frequency	70 MHz	
<b>DC Saturation</b>	Q min on HP4342A	84	
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00	
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	99.5%	
<b>Coating/Pkg</b>	Percent Initial Perm(min.)	99.4%	
	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
<b>Winding Table</b>	Package Quantity	50,000 Pcs/Box	
	Wire Size	AWG	28 30 32 34 36 38 40 42 44 #N/A #N/A
<b>Single Layer</b>	mm	0.315 0.250 0.200 0.160 0.125 0.100 0.080 0.063 0.050 #N/A #N/A	
	Turns	10 13 17 22 28 36 45 57 72 #N/A #N/A	
<b>Full Winding</b>	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	
	Turns	10 15 23 36 56 86 133 206 319 #N/A #N/A	
<b>Full Winding</b>	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	

