



**Part Number:** T7-2

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	1.78 mm 1.91 mm	0.070 in 0.075 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	0.89 mm 0.76 mm	0.035 in 0.030 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	0.76 mm 0.89 mm	0.030 in 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>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	10	
	A <sub>L</sub> value (nominal)	1.35 nH/N <sup>2</sup>	
	Test Winding	N=10, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.016 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	
	Q test winding	N=10, #36 AWG	
	Q frequency	30 MHz	
<b>DC Saturation</b>	Q min on HP4342A	42	
	%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%	
<b>Coating/Pkg</b>	Percent Initial Perm(min.)	94.8%	
	Coating Type:	Parylene C	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
<b>Winding Table</b>	Package Quantity	250,000 Pcs/Box	
	Wire Size	AWG	36, 38, 40, 42, 44, #N/A, #N/A, #N/A, #N/A, #N/A, #N/A
<b>Single Layer</b>	mm	0.125, 0.100, 0.080, 0.063, 0.050, #N/A, #N/A, #N/A, #N/A, #N/A, #N/A	
	Turns	11, 14, 18, 24, 30, #N/A, #N/A, #N/A, #N/A, #N/A, #N/A	
<b>Full Winding</b>	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	
	Turns	11, 17, 26, 40, 62, #N/A, #N/A, #N/A, #N/A, #N/A, #N/A	
<b>Full Winding</b>	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	

