



**Part Number:** **T10-2**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	2.46 mm 2.59 mm	0.097 in 0.102 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	1.12 mm 0.99 mm	0.044 in 0.039 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	0.00450 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	0.560 cm	
	V <sub>e</sub> - Eff. Core Volume	0.00250	
	WA - Min. Eff. Window Area	0.00771 cm <sup>2</sup>	
	sa - Surface Area	0.219 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=25, #40 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.050 V	
<b>Core Loss &amp; Q</b>	A <sub>L</sub> tolerance	±5%	
	Core Loss(mW/cm <sup>3</sup> )=	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	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, #40 AWG	
	Q frequency	20 MHz	
<b>DC Saturation</b>	Q min on HP4342A	61	
	%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	34 36 38 40 42 44 #N/A #N/A #N/A #N/A #N/A
<b>Single Layer</b>	mm	0.160 0.125 0.100 0.080 0.063 0.050 #N/A #N/A #N/A #N/A #N/A	
	Turns	12 15 19 25 32 40 #N/A #N/A #N/A #N/A #N/A	
<b>Full Winding</b>	Rdc(Ω)	39.8 m 79.1 m 159.4 m 333.5 m 679.0 m 1.3 #N/A #N/A #N/A #N/A #N/A	
	Turns	12 18 28 44 68 105 #N/A #N/A #N/A #N/A #N/A	
<b>Full Winding</b>	Rdc(Ω)	39.8 m 94.9 m 234.9 m 587.0 m 1.4 3.5 #N/A #N/A #N/A #N/A #N/A	

