



**Part Number:** **T20-2D**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	5.08 mm 5.33 mm	0.200 in 0.210 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	2.24 mm 1.98 mm	0.088 in 0.078 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	3.56 mm 3.81 mm	0.140 in 0.150 in
<b>Mass</b>	(approximate)	0.26 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0460 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	1.15 cm	
	V <sub>e</sub> - Eff. Core Volume	0.0520 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	0.0308 cm <sup>2</sup>	
	sa - Surface Area	1.29 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	10	
	A <sub>L</sub> value (nominal)	5 nH/N <sup>2</sup>	
	Test Winding	N=36, #36 AWG	
	Frequency	1 MHz	
	Voltage on Agilent 4284A	0.74 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=36, #36 AWG	
	Q frequency	0 kHz	
<b>DC Saturation</b>	Q min on HP4342A	114	
	%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	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	12 16 20 26 33 42 52 66 83 #N/A #N/A	
<b>Full Winding</b>	Rdc(Ω)	30.6 m 64.8 m 128.8 m 266.3 m 537.6 m 1.1 2.1 4.3 8.7 #N/A #N/A	
	Turns	13 20 30 47 73 113 175 271 419 #N/A #N/A	
<b>Full Winding</b>	Rdc(Ω)	33.1 m 81.0 m 193.2 m 481.4 m 1.2 2.9 7.2 17.8 43.7 #N/A #N/A	

