



Part Number: **T20-12**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	5.08 mm 5.33 mm	0.200 in 0.210 in										
ID	(nom. - bare core) (min. - after coating)	2.24 mm 1.98 mm	0.088 in 0.078 in										
Ht	(nom. - bare core) (max. - after coating)	1.78 mm 2.03 mm	0.070 in 0.080 in										
Mass	(approximate)	0.12 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0230 cm ²											
	L _e - Eff. Mag. Path Length	1.15 cm											
	V _e - Eff. Core Volume	0.0260 cm ³											
	WA - Min. Eff. Window Area	0.0308 cm ²											
	sa - Surface Area	0.962 cm ²											
Inductance	μ _i (reference)	4											
	A _L value (nominal)	1 nH/N ²											
	Test Winding	N=50, #36 AWG											
	Frequency	1 MHz											
	Voltage on Agilent 4284A	0.51 V											
Core Loss	A _L tolerance	±5%											
	Core Loss(mW/cm ³)=	$\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$											
	where B _{pk} expressed in gauss, f expressed in hertz, and:	a=4.00E+09, b=3.00E+08, c=2.70E+06, d=4.40E-16											
	B _{pk}	140 G											
	frequency	100 kHz											
DC Saturation	Core Loss (nominal)	18 mW/cm ³											
	Core Loss (maximum)	20 mW/cm ³											
	%μ _i =	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.00E-02, b=1.34E-08, c=1.55, d=0.00											
	H _{DC}	200 Oe											
Coating/Pkg	Percent Initial Perm(nom.)	99.5%											
	Percent Initial Perm(min.)	99.4%											
	Coating Type:	Parylene C											
	Voltage Breakdown (min.)	500 Vrms, 60Hz											
Winding Table	Limit	3 mA, 5 s											
	Package Quantity	100,000 Pcs/Box											
	Wire Size	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
	Single Layer	Turns	12	16	20	26	33	42	52	66	83	#N/A	#N/A
Rdc(Ω)		21.5 m	45.5 m	90.5 m	187.2 m	377.8 m	764.7 m	1.5	3.0	6.1	#N/A	#N/A	
Full Winding	Turns	13	20	30	47	73	113	175	271	419	#N/A	#N/A	
	Rdc(Ω)	23.3 m	56.9 m	135.8 m	338.3 m	835.7 m	2.1	5.1	12.5	30.7	#N/A	#N/A	

