



Part Number: **T520-2**

Revision 20190524 - Generated 2019-May-30



OD	(nom. - bare core) (max. - after coating)	132.08 mm 133.35 mm	5.200 in 5.250 in
ID	(nom. - bare core) (min. - after coating)	78.23 mm 76.96 mm	3.080 in 3.030 in
Ht	(nom. - bare core) (max. - after coating)	20.32 mm 21.59 mm	0.800 in 0.850 in
Mass	(approximate)	870 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section L_e - Eff. Mag. Path Length V_e - Eff. Core Volume WA - Min. Eff. Window Area sa - Surface Area mlt - mean length per turn	5.24 cm ² 33.1 cm 173 cm ³ 46.5 cm ² 509 cm ² 13.8 cm	
Inductance	μ_i (reference) A_L value (nominal) Test Winding Frequency Voltage on Agilent 4284A A_L tolerance	10 20 nH/N ² N=100, #20 AWG 10 kHz 1.3 V ±5%	
Core Loss & Q	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: $a=4.00E+09$, $b=3.00E+08$, $c=2.70E+06$, $d=9.60E-16$ Q test winding Q frequency Q min on HP4342A	N=100, #20 AWG 10 kHz 1.3 V ±5%	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: $a=1.00E-02$, $b=1.83E-07$, $c=1.46$, $d=0.00$ H_{DC} Percent Initial Perm(nom.) Percent Initial Perm(min.)	200 Oe 95.9% 94.8%	
Coating/Pkg	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Red/Clear Epoxy Paint 500 Vrms, 60Hz 3 mA, 5 s 12 Pcs/Box	

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Single Layer	Turns	62	78	98	123	153	192	239	298	371	463	577
	Full Winding	Rdc(Ω)	17.6 m	35.2 m	70.4 m	140.4 m	277.8 m	554.5 m	1.1	2.2	4.3	8.6	17.0
	Turns	244	377	583	903	1,397	2,163	3,347	5,181	8,019	12,411	19,209	
	Rdc(Ω)	69.3 m	170.2 m	418.6 m	1.0	2.5	6.2	15.4	37.8	93.2	229.3	564.4	

