



**Part Number:** **T25-45**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	6.48 mm 6.86 mm	0.255 in 0.270 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	3.05 mm 2.67 mm	0.120 in 0.105 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	2.44 mm 2.95 mm	0.096 in 0.116 in
<b>Mass</b>	(approximate)	0.40 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section L <sub>e</sub> - Eff. Mag. Path Length V <sub>e</sub> - Eff. Core Volume WA - Min. Eff. Window Area sa - Surface Area mlt - mean length per turn	0.0370 cm <sup>2</sup> 1.50 cm 0.0550 cm <sup>3</sup> 0.0559 cm <sup>2</sup> 1.68 cm <sup>2</sup> 1.14 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference) A <sub>L</sub> value (nominal) Test Winding Frequency Voltage on Agilent 4284A A <sub>L</sub> tolerance	100 31 nH/N <sup>2</sup> N=50, #34 AWG 10 kHz 0.008 V ±10%	
<b>Core Loss</b>	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=1.20E+09, b=1.30E+08, c=2.40E+06, d=1.20E-13 Bpk frequency Core Loss (nominal) Core Loss (maximum)	  140 G 100 kHz 61 mW/cm <sup>3</sup> 71 mW/cm <sup>3</sup>	
<b>DC Saturation</b>	%μ <sub>i</sub> = $\frac{1}{a + b \cdot H^c} + d$ where H expressed in oersteds, and: a=1.00E-02, b=2.44E-05, c=1.61, d=0.00 H <sub>DC</sub> Percent Initial Perm(nom.) Percent Initial Perm(min.)	  50 Oe 43.3% 36.3%	
<b>Coating/Pkg</b>	Coating Type: Voltage Breakdown (min.) Limit Package Quantity	Black/Black Epoxy Paint 500 Vrms, 60Hz 3 mA, 5 s 20,000 Pcs/Box	

<b>Winding Table</b>	<b>Wire Size</b>	AWG	24	26	28	30	32	34	36	38	40	42	44
		mm	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050
	<b>Single Layer</b>	Turns	10	13	17	22	28	36	45	57	72	90	112
	<b>Full Winding</b>	Rdc(Ω)	9.6 m	19.9 m	41.3 m	85.0 m	172.1 m	351.9 m	699.6 m	1.4	2.8	5.6	11.1
		Turns	10	15	23	36	55	86	132	205	317	491	760
		Rdc(Ω)	9.6 m	22.9 m	55.9 m	139.1 m	338.1 m	840.7 m	2.1	5.1	12.5	30.7	75.6

