



**Part Number:** **T157-6**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	39.88 mm 40.51 mm	1.570 in 1.595 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	24.13 mm 23.50 mm	0.950 in 0.925 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	14.48 mm 15.24 mm	0.570 in 0.600 in
<b>Mass</b>	(approximate)	54 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	1.06 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	10.1 cm	
	V <sub>e</sub> - Eff. Core Volume	10.7 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	4.34 cm <sup>2</sup>	
	sa - Surface Area	59.7 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	8.5	
	A <sub>L</sub> value (nominal)	11.5 nH/N <sup>2</sup>	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.47 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=8.90E-16	
	Q test winding	N=100, #22 AWG	
	Q frequency	7 MHz	
<b>DC Saturation</b>	Q min on HP4342A	275	
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=4.87E-08, c=1.57, d=0.00	
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	98.1%	
<b>Coating/Pkg</b>	Percent Initial Perm(min.)	97.4%	
	Coating Type:	Yellow/Clear Epoxy Paint	
	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
<b>Winding Table</b>	Package Quantity	240 Pcs/Box	
	Wire Size	AWG	8 10 12 14 16 18 20 22 24 26 28
<b>Single Layer</b>	mm	3.150 2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315	
	Turns	17 22 28 36 45 57 71 89 111 139 174	
<b>Full Winding</b>	Rdc(Ω)	2.1 m 4.3 m 8.6 m 17.6 m 35.1 m 70.6 m 140.0 m 279.0 m 553.4 m 1.1 2.2	
	Turns	23 35 54 84 130 202 312 483 747 1,157 1,790	
<b>Full Winding</b>	Rdc(Ω)	2.8 m 6.8 m 16.6 m 41.2 m 101.3 m 250.4 m 615.0 m 1.5 3.7 9.2 22.6	

