



**Part Number:** **T175-26**

Revision 20190524 - Generated 2019-May-30



<b>OD</b>	(nom. - bare core) (max. - after coating)	44.45 mm 45.09 mm	1.750 in 1.775 in
<b>ID</b>	(nom. - bare core) (min. - after coating)	27.18 mm 26.54 mm	1.070 in 1.045 in
<b>Ht</b>	(nom. - bare core) (max. - after coating)	16.51 mm 17.27 mm	0.650 in 0.680 in
<b>Mass</b>	(approximate)	110 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	1.34 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	11.2 cm	
	V <sub>e</sub> - Eff. Core Volume	15.0 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	5.53 cm <sup>2</sup>	
	sa - Surface Area	74.6 cm <sup>2</sup>	
	mlt - mean length per turn	6.64 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	75	
	A <sub>L</sub> value (nominal)	105 nH/N <sup>2</sup>	
	Test Winding	N=100, #24 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.59 V	
<b>Core Loss</b>	A <sub>L</sub> tolerance	±10%	
	Core Loss(mW/cm <sup>3</sup> )=	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and:	a=1.00E+09, b=1.10E+08, c=1.90E+06, d=1.90E-13	
	B <sub>pk</sub>	140 G	
	frequency	100 kHz	
<b>DC Saturation</b>	Core Loss (nominal)	83 mW/cm <sup>3</sup>	
	Core Loss (maximum)	95 mW/cm <sup>3</sup>	
	%μ <sub>i</sub> =	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.00E-02, b=9.70E-06, c=1.72, d=0.00	
<b>Coating/Pkg</b>	H <sub>DC</sub>	50 Oe	
	Percent Initial Perm(nom.)	55.2%	
	Percent Initial Perm(min.)	47.4%	
	Coating Type:	Yellow/White Epoxy Paint	
<b>Winding Table</b>	Voltage Breakdown (min.)	500 Vrms, 60Hz	
	Limit	3 mA, 5 s	
	Package Quantity	140 Pcs/Box	
	<b>Wire Size</b>	AWG	8
<b>Single Layer</b>	mm	3.150	2.500
	Turns	20	25
<b>Full Winding</b>	Rdc(Ω)	2.7 m	5.4 m
	Turns	29	45
<b>Winding Table</b>		12	14
		16	18
		20	22
		24	26
		28	
		32	40
		51	64
		81	101
		126	158
		197	
		29	45
		69	107
		166	257
	398	616	
	954	1,476	
	2,285		
	Rdc(Ω)	4.0 m	9.8 m
		23.8 m	58.7 m
		144.9 m	356.8 m
		878.7 m	2.2
		5.3	13.1
		32.3	

