



**Part Number: FS-130040-2**

Revision 20190529 - Generated 2019-May-29



(If coated, Max./Min. includes coating)

<b>OD</b>	(nom. - bare core) (max.)	33.02 mm 33.83 mm	1.300 in 1.332 in
<b>ID</b>	(nom. - bare core) (min.)	19.94 mm 19.30 mm	0.785 in 0.760 in
<b>HT</b>	(nom. - bare core) (max.)	10.67 mm 11.61 mm	0.420 in 0.457 in
<b>Mass</b>	(approximate)	36 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.672 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	8.15 cm	
	V <sub>e</sub> - Eff. Core Volume	5.48 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	2.93 cm <sup>2</sup>	
	sa - Surface Area	40.1 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	40	
	A <sub>L</sub> value (nominal)	41 nH/N <sup>2</sup>	
<b>Core Loss</b>	Test Winding	N=70, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.21 V	
	AL tolerance	±8%	
	Core Loss(mW/cm <sup>3</sup> )= $\frac{f}{\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}}} + d \cdot Bpk^2 \cdot f^2$		
<b>DC Saturation</b>	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and: a=1.000E+06, b=3.071E+08, c=3.524E+06, d=5.634E-14		
	B <sub>pk</sub>	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	780 mW/cm <sup>3</sup>	
	Core Loss (maximum)	897 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=1.000E-02, b=6.314E-08, c=2.151, d=0.000		
	H <sub>DC</sub>	200 Oe	
	Percent Initial Perm(nom.)	64.0%	
<b>Coating/Pkg</b>	Percent Initial Perm(min.)	54.5%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
<b>Winding Table</b>	Package Quantity	512 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	14 18 22 29 36 46 58 73 91 114 142	
<b>Full Winding</b>	Rdc(Ω)	1.4 m 2.8 m 5.4 m 11.4 m 22.4 m 45.6 m 91.5 m 183.1 m 363.0 m 723.2 m 1.4	
	Turns	15 24 37 57 88 136 211 326 504 780 1,208	
<b>Full Winding</b>	Rdc(Ω)	1.5 m 3.7 m 9.1 m 22.3 m 54.9 m 134.9 m 332.8 m 817.6 m 2.0 4.9 12.2	

