



**Part Number: FS-027040-8**

Revision 20190529 - Generated 2019-May-29



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

<b>OD</b>	(nom. - bare core) (max.)	6.60 mm 7.24 mm	0.260 in 0.285 in
<b>ID</b>	(nom. - bare core) (min.)	2.67 mm 2.29 mm	0.105 in 0.090 in
<b>HT</b>	(nom. - bare core) (max.)	2.54 mm 3.18 mm	0.100 in 0.125 in
<b>Mass</b>	(approximate)	0.42 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.0467 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	1.36 cm	
	V <sub>e</sub> - Eff. Core Volume	0.0640 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	0.0412 cm <sup>2</sup>	
	sa - Surface Area	1.83 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	40	
	A <sub>L</sub> value (nominal)	17 nH/N <sup>2</sup>	
<b>Core Loss</b>	Test Winding	N=35, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.007 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:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
<b>Winding Table</b>	Package Quantity	21,600 Pcs/Box	
	Wire Size		

<b>Winding Table</b>	<b>Single Layer</b>	Turns	11	14	19	24	30	38	49	61	77	96	-
		Rdc(Ω)	18.3 m	37.1 m	80.1 m	160.9 m	319.9 m	644.5 m	1.3	2.6	5.3	10.4	-
	<b>Full Winding</b>	Turns	11	17	26	41	63	98	151	234	362	560	-
		Rdc(Ω)	18.3 m	45.1 m	109.6 m	274.9 m	671.8 m	1.7	4.1	10.0	24.7	60.8	-

