



**Part Number:** EFS-0130604-040

Revision 20160816 - Generated 2016-Aug-16



<b>A</b>	12.7 ± 0.25 mm	0.500 ± 0.010 in
<b>B</b>	6.4 ± 0.10 mm	0.252 ± 0.004 in
<b>C</b>	3.56 ± 0.15 mm	0.140 ± 0.006 in
<b>D</b>	4.42 mm (min.)	0.174 in (min.)
<b>E</b>	8.89 mm (min.)	0.350 in (min.)
<b>F</b>	3.56 ± 0.13 mm	0.140 ± 0.005 in
<b>Mass</b>	(approximate)	1.2 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.130 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	2.96 cm
	V <sub>e</sub> - Eff. Core Volume	0.385 cm <sup>3</sup>
	WA - Min. Eff. Window Area	0.230 cm <sup>2</sup>
	sa - Surface Area	6.01 cm <sup>2</sup>
	mlt - mean length per turn	2.49 cm
<b>Inductance</b>	μ <sub>i</sub> (reference)	40
	A <sub>L</sub> value (nominal)	28 nH/N <sup>2</sup>
	Test Winding	N=100, #28 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.058 V
	A <sub>L</sub> tolerance	±8%
<b>Core Loss</b>	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and: a=1.00E+06, b=2.70E+08, c=3.23E+06, d=7.09E-14	
	B <sub>pk</sub>	1000 G
	frequency	50 kHz
	Core Loss (nominal)	889 mW/cm <sup>3</sup>
Core Loss (maximum)	1,022 mW/cm <sup>3</sup>	
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=0.01, b=1.93E-06, c=1.62, d=19.99	
	H <sub>DC</sub>	100 Oe
	Percent Initial Perm(nom.)	83.3%
Percent Initial Perm(min.)	79.0%	
<b>Coating/Pkg</b>	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	1,500 Halves/Box

<b>Winding Table</b>	<b>Wire Size</b>	AWG	20	22	24	26	28	30	32	34	36	38	40
		mm	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080
	<b>Full Winding</b>	Turns	17	26	41	63	98	151	234	363	561	869	1,345
	Rdc(Ω)		14.1 m	34.3 m	85.9 m	209.9 m	519.4 m	1.3	3.1	7.7	19.0	46.9	115.3

