



Part Number: **EFS-0803820-040**

Revision 20160816 - Generated 2016-Aug-16



A	80 ± 1.19 mm	3.150 ± 0.047 in
B	38.1 ± 0.58 mm	1.500 ± 0.023 in
C	19.8 ± 0.41 mm	0.780 ± 0.016 in
D	28.1 mm (min.)	1.106 in (min.)
E	59.3 mm (min.)	2.335 in (min.)
F	19.8 ± 0.41 mm	0.780 ± 0.016 in
Mass	(approximate)	220 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.89 cm ²
	L _e - Eff. Mag. Path Length	18.5 cm
	V _e - Eff. Core Volume	72.1 cm ³
	WA - Min. Eff. Window Area	11.0 cm ²
	sa - Surface Area	229 cm ²
	mlt - mean length per turn	15.8 cm
Inductance	μ _i (reference)	40
	A _L value (nominal)	145 nH/N ²
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.7 V
	A _L tolerance	±8%
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	where B _{pk} 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 _{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	889 mW/cm ³
Core Loss (maximum)	1,022 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=0.01, b=1.93E-06, c=1.62, d=19.99	
	H _{DC}	100 Oe
	Percent Initial Perm(nom.)	83.3%
Percent Initial Perm(min.)	79.0%	
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	60 Halves/Box

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Full Winding	Turns	59	92	142	220	340	526	814	1,260	1,950	3,019	4,672
		Rdc(Ω)	19.2 m	47.6 m	116.8 m	287.9 m	707.5 m	1.7	4.3	10.5	26.0	63.9	157.3

