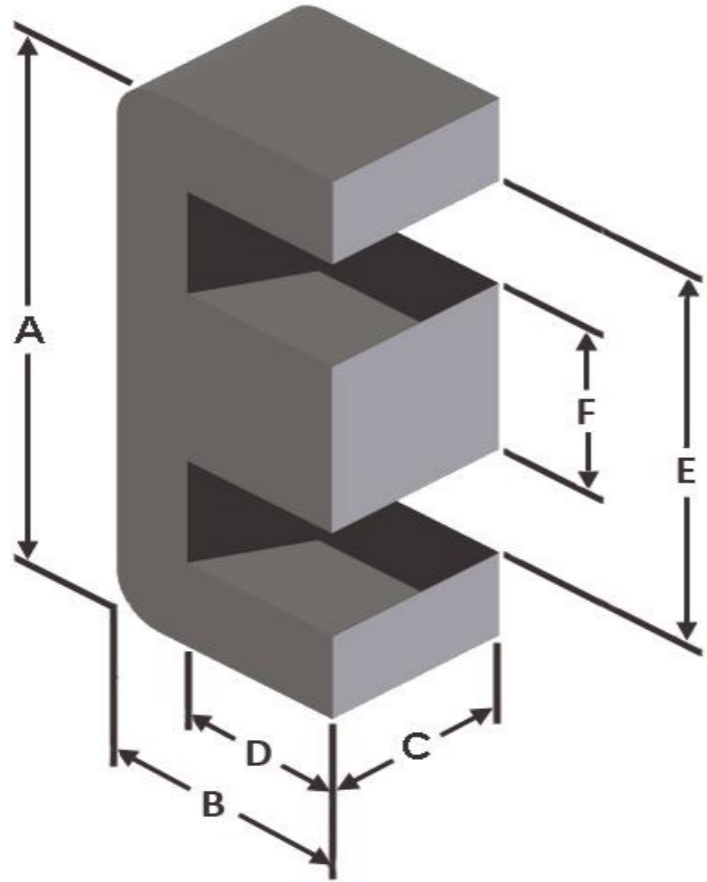




**Part Number:** EMS-0802420-090

Revision 20160816 - Generated 2016-Aug-16



<b>A</b>	80 ± 1.19 mm	3.150 ± 0.047 in
<b>B</b>	24.05 ± 0.58 mm	0.947 ± 0.023 in
<b>C</b>	19.8 ± 0.41 mm	0.780 ± 0.016 in
<b>D</b>	14.05 mm (min.)	0.553 in (min.)
<b>E</b>	59.3 mm (min.)	2.335 in (min.)
<b>F</b>	19.8 ± 0.41 mm	0.780 ± 0.016 in
<b>Mass</b>	(approximate)	150 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	3.89 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	12.88 cm
	V <sub>e</sub> - Eff. Core Volume	50.1 cm <sup>3</sup>
	WA - Min. Eff. Window Area	5.49 cm <sup>2</sup>
	sa - Surface Area	162 cm <sup>2</sup>
mlt - mean length per turn	15.8 cm	
<b>Inductance</b>	μ <sub>i</sub> (reference)	90
	A <sub>L</sub> value (nominal)	380 nH/N <sup>2</sup>
	Test Winding	N=100, #16 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.7 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=1.46E+09, b=8.28E+08, c=4.62E+06, d=1.09E-14	
	B <sub>pk</sub>	1000 G
	frequency	50 kHz
	Core Loss (nominal)	345 mW/cm <sup>3</sup>
Core Loss (maximum)	396 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=1.26E-05, c=1.70, d=0.00	
	H <sub>DC</sub>	50 Oe
	Percent Initial Perm(nom.)	50.6%
Percent Initial Perm(min.)	42.9%	
<b>Coating/Pkg</b>	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	84 Halves/Box

<b>Winding Table</b>	<b>Wire Size</b>	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
	<b>Full Winding</b>	Turns	30	46	71	110	170	263	407	630	975	1,509	2,336
	Rdc(Ω)		9.8 m	23.8 m	58.4 m	143.9 m	353.8 m	870.4 m	2.1	5.3	13.0	31.9	78.7

