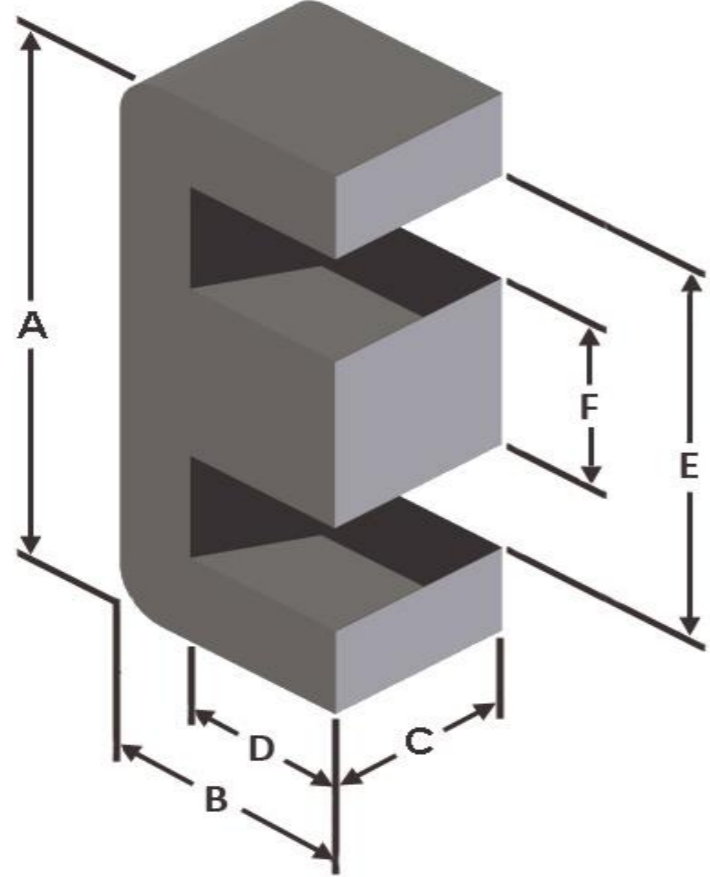




Part Number: EMS-0552821-040
Revision 20160816 - Generated 2016-Aug-16



A	54.9 ± 0.81 mm	2.161 ± 0.032 in
B	27.6 ± 0.41 mm	1.087 ± 0.016 in
C	20.6 ± 0.41 mm	0.811 ± 0.016 in
D	18.5 mm (min.)	0.728 in (min.)
E	37.5 mm (min.)	1.476 in (min.)
F	16.8 ± 0.33 mm	0.661 ± 0.013 in
Mass	(approximate)	120 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.50 cm ²
	L _e - Eff. Mag. Path Length	12.3 cm
	V _e - Eff. Core Volume	43.1 cm ³
	WA - Min. Eff. Window Area	3.77 cm ²
	sa - Surface Area	121 cm ²
	mlt - mean length per turn	11.6 cm
Inductance	μ _i (reference)	40
	A _L value (nominal)	157 nH/N ²
	Test Winding	N=100, #16 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.6 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=6.80E+08, c=8.07E+06, d=2.16E-14	
	B _{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	338 mW/cm ³
	Core Loss (maximum)	388 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=2.54E-06, c=1.68, d=0.00	
	H _{DC}	100 Oe
	Percent Initial Perm(nom.)	63.2%
	Percent Initial Perm(min.)	55.9%
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	96 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	20	31	49	75	117	180	279	432	669	1,036	1,603
	Rdc(Ω)		4.8 m	11.8 m	29.6 m	72.1 m	178.8 m	437.6 m	1.1	2.7	6.5	16.1	39.6

