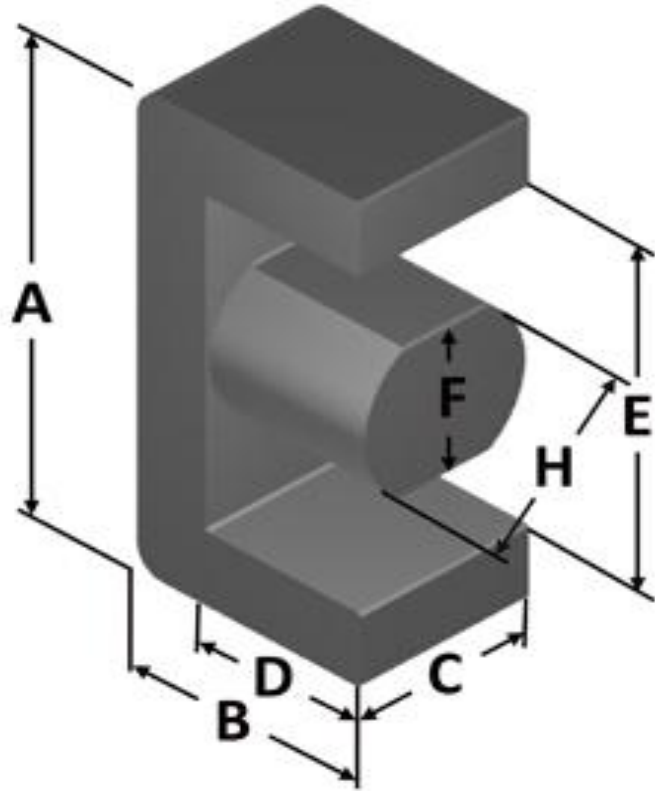




Part Number: **EM145-52**
 Revision 20190524 - Generated 2019-May-30



A	36.96 ± 0.38 mm	1.455 ± 0.015 in
B	17.40 ± 0.19 mm	0.685 ± 0.008 in
C	10.80 ± 0.25 mm	0.425 ± 0.010 in
D	12.07 mm (nom.)	0.475 in (nom.)
E	26.29 mm (nom.)	1.035 in (nom.)
F	10.80 ± 0.25 mm	0.425 ± 0.010 in
H	10.80 ± 0.38 mm	0.425 ± 0.015 in
Mass	(approximate)	32 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.915 cm ²
	L _e - Eff. Mag. Path Length	8.50 cm
	V _e - Eff. Core Volume	9.28 cm ³
	WA - Min. Eff. Window Area	1.84 cm ²
	sa - Surface Area	49.0 cm ²
	mlt - mean length per turn	7.42 cm
Inductance	μ _i (reference)	75
	A _L value (nominal)	125 nH/N ²
	Test Winding	N=100, #20 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.41 V
A _L tolerance	±10%	
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+09, b=1.10E+08, c=2.10E+06, d=6.90E-14	
	B _{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	58 mW/cm ³
Core Loss (maximum)	67 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=1.00E-02, b=4.66E-06, c=1.84, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm(nom.)	61.6%
Percent Initial Perm(min.)	53.4%	
Coating/Pkg	Coating Type:	None, Green/Blue Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	360 Halves/Box

Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Full Winding	Turns	15	24	37	57	88	136	211	326	505	782	1,210
		Rdc(Ω)	3.6 m	9.3 m	22.7 m	55.6 m	136.5 m	335.6 m	828.1 m	2.0	5.0	12.3	30.4

