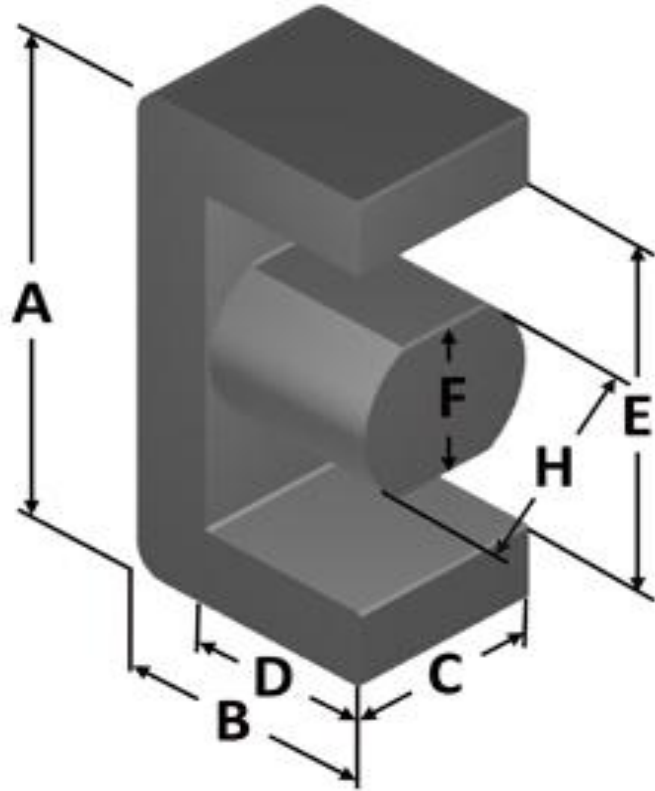




Part Number: **EM102-52**
Revision 20190524 - Generated 2019-May-30



A	25.40 ± 0.25 mm	1.000 ± 0.010 in
B	12.70 ± 0.13 mm	0.500 ± 0.005 in
C	12.70 ± 0.13 mm	0.500 ± 0.005 in
D	10.16 mm (nom.)	0.400 in (nom.)
E	20.32 mm (nom.)	0.800 in (nom.)
F	8.89 ± 0.18 mm	0.350 ± 0.007 in
H	8.89 ± 0.13 mm	0.350 ± 0.005 in
Mass	(approximate)	14 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.637 cm ²
	L _e - Eff. Mag. Path Length	6.28 cm
	V _e - Eff. Core Volume	4.00 cm ³
	WA - Min. Eff. Window Area	1.14 cm ²
	sa - Surface Area	30.5 cm ²
mlt - mean length per turn	6.60 cm	
Inductance	μ _i (reference)	75
	A _L value (nominal)	84.8 nH/N ²
	Test Winding	N=0, #0 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	#DIV/0!
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
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	720 Halves/Box

Winding Table	Wire Size	AWG	12	14	16	18	20	22	24	26	28	30	32
		mm	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200
	Full Winding	Turns	15	23	35	55	85	131	203	314	486	753	1,165
	Rdc(Ω)	5.2 m	12.6 m	30.4 m	76.0 m	186.8 m	457.8 m	1.1	2.8	6.8	16.8	41.4	

