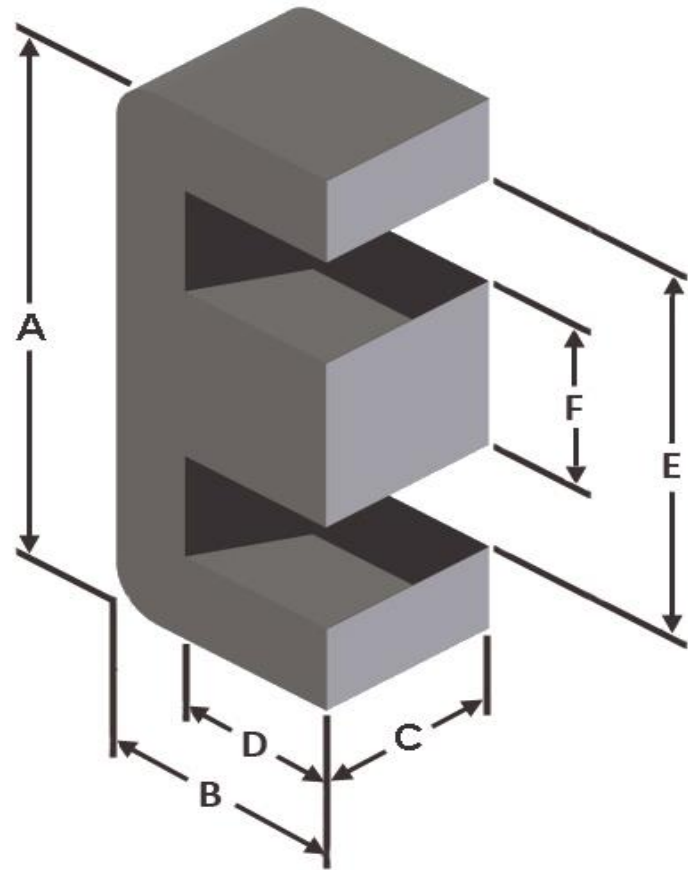




**Part Number:** **E137-2**  
Revision 20160713 - Generated 2016-Aug-15



<b>A</b>	34.93 ± 0.38 mm	1.375 ± 0.015 in
<b>B</b>	14.53 ± 0.20 mm	0.572 ± 0.008 in
<b>C</b>	9.53 ± 0.18 mm	0.375 ± 0.007 in
<b>D</b>	9.78 mm (nom.)	0.385 in (nom.)
<b>E</b>	25.40 mm (nom.)	1.000 in (nom.)
<b>F</b>	9.53 ± 0.18 mm	0.375 ± 0.007 in
<b>Mass</b>	(approximate)	17 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.907 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	7.40 cm
	V <sub>e</sub> - Eff. Core Volume	6.72 cm <sup>3</sup>
	WA - Min. Eff. Window Area	1.54 cm <sup>2</sup>
	sa - Surface Area	39.6 cm <sup>2</sup>
	mlt - mean length per turn	6.99 cm
<b>Inductance</b>	μ <sub>i</sub> (reference)	10
	A <sub>L</sub> value (nominal)	32 nH/N <sup>2</sup>
	Test Winding	N=100, #20 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.40 V
A <sub>L</sub> tolerance	±5%	
<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=4.00E+09, b=3.00E+08, c=2.70E+06, d=9.60E-16	
	B <sub>pk</sub>	140 G
	frequency	100 kHz
	Core Loss (nominal)	18 mW/cm <sup>3</sup>
Core Loss (maximum)	20 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=1.00E-02, b=1.83E-07, c=1.46, d=0.00	
	H <sub>DC</sub>	200 Oe
	Percent Initial Perm(nom.)	95.9%
Percent Initial Perm(min.)	94.8%	
<b>Coating/Pkg</b>	Coating Type:	None, Red/Clear Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	800 Halves/Box

<b>Winding Table</b>	<b>Wire Size</b>	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
	<b>Full Winding</b>	Turns	20	31	47	74	114	176	273	422	653	1,010	1,564
		Rdc(Ω)	7.3 m	17.9 m	43.2 m	108.1 m	264.9 m	650.5 m	1.6	3.9	9.7	23.9	58.8

