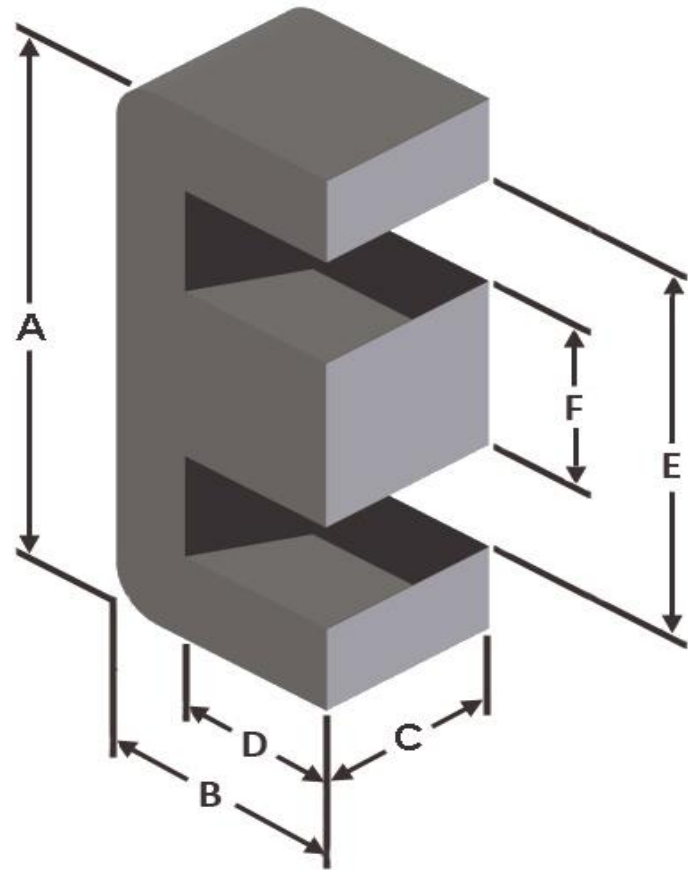




**Part Number:** **E75-18**

Revision 20160713 - Generated 2016-Aug-15



<b>A</b>	19.05 ± 0.25 mm	0.750 ± 0.010 in
<b>B</b>	8.08 ± 0.13 mm	0.318 ± 0.005 in
<b>C</b>	4.75 ± 0.13 mm	0.187 ± 0.005 in
<b>D</b>	5.65 mm (nom.)	0.223 in (nom.)
<b>E</b>	14.27 mm (nom.)	0.562 in (nom.)
<b>F</b>	4.75 ± 0.13 mm	0.187 ± 0.005 in
<b>Mass</b>	(approximate)	3.1 grams/half
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.226 cm <sup>2</sup>
	L <sub>e</sub> - Eff. Mag. Path Length	4.20 cm
	V <sub>e</sub> - Eff. Core Volume	0.936 cm <sup>3</sup>
	WA - Min. Eff. Window Area	0.531 cm <sup>2</sup>
	sa - Surface Area	11.9 cm <sup>2</sup>
	mlt - mean length per turn	3.80 cm
<b>Inductance</b>	μ <sub>i</sub> (reference)	55
	A <sub>L</sub> value (nominal)	45.5 nH/N <sup>2</sup>
	Test Winding	N=100, #26 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.10 V
A <sub>L</sub> tolerance	±10%	
<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=8.00E+08, b=1.70E+08, c=9.00E+05, d=3.10E-14	
	B <sub>pk</sub>	140 G
	frequency	100 kHz
	Core Loss (nominal)	46 mW/cm <sup>3</sup>
Core Loss (maximum)	53 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=4.72E-06, c=1.65, d=0.00	
	H <sub>DC</sub>	100 Oe
	Percent Initial Perm(nom.)	51.4%
Percent Initial Perm(min.)	43.9%	
<b>Coating/Pkg</b>	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	4,000 Halves/Box

<b>Winding Table</b>	<b>Wire Size</b>	AWG	16	18	20	22	24	26	28	30	32	34	36
		mm	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125
	<b>Full Winding</b>	Turns	16	25	39	61	94	146	226	350	541	838	1,296
		Rdc(Ω)	8.0 m	19.9 m	49.4 m	122.8 m	301.0 m	743.5 m	1.8	4.5	11.1	27.3	67.1

