



Part Number: **E75-40**
Revision 20160713 - Generated 2016-Aug-15



A	19.05 ± 0.25 mm	0.750 ± 0.010 in
B	8.08 ± 0.13 mm	0.318 ± 0.005 in
C	4.75 ± 0.13 mm	0.187 ± 0.005 in
D	5.65 mm (nom.)	0.223 in (nom.)
E	14.27 mm (nom.)	0.562 in (nom.)
F	4.75 ± 0.13 mm	0.187 ± 0.005 in
Mass	(approximate)	3.2 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.226 cm ²
	L _e - Eff. Mag. Path Length	4.20 cm
	V _e - Eff. Core Volume	0.936 cm ³
	WA - Min. Eff. Window Area	0.531 cm ²
	sa - Surface Area	11.9 cm ²
	mlt - mean length per turn	3.80 cm
Inductance	μ _i (reference)	60
	A _L value (nominal)	55 nH/N ²
	Test Winding	N=100, #26 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.10 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=1.10E+09, b=3.30E+07, c=2.50E+06, d=3.10E-13	
	B _{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	127 mW/cm ³
Core Loss (maximum)	146 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=8.93E-06, c=1.61, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm(nom.)	67.0%
Percent Initial Perm(min.)	60.2%	
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	4,000 Halves/Box

Winding Table	Wire Size	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
	Full Winding	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

