



Part Number: **E75-40**

Revision 20190524 - Generated 2019-May-30



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	5.78 mm (nom.)	0.228 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	0.543 cm ²											
	sa - Surface Area	12.0 cm ²											
Inductance	mlt - mean length per turn	3.80 cm											
	μ _i (reference)	60											
	A _L value (nominal)	55 nH/N ²											
	Test Winding	N=100, #26 AWG											
	Frequency	10 kHz											
Core Loss	Voltage on Agilent 4284A	0.10 V											
	A _L tolerance	±10%											
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$												
	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											
DC Saturation	frequency	100 kHz											
	Core Loss (nominal)	127 mW/cm ³											
	Core Loss (maximum)	146 mW/cm ³											
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: a=1.00E-02, b=8.93E-06, c=1.61, d=0.00												
Coating/Pkg	H _{DC}	50 Oe											
	Percent Initial Perm(nom.)	67.0%											
	Percent Initial Perm(min.)	60.2%											
	Coating Type:	None											
	Voltage Breakdown (min.)	N/A											
Winding Table	Limit	N/A											
	Package Quantity	4,000 Halves/Box											
	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	17	26	40	62	96	149	231	357	553	856	1,325
Rdc(Ω)		8.5 m	20.7 m	50.6 m	124.8 m	307.4 m	758.8 m	1.9	4.6	11.3	27.9	68.7	

