



Part Number: **E49-8**
Revision 20160713 - Generated 2016-Aug-15



A	12.70 ± 0.25 mm	0.500 ± 0.010 in
B	5.56 ± 0.13 mm	0.219 ± 0.005 in
C	3.18 ± 0.13 mm	0.125 ± 0.005 in
D	3.96 mm (nom.)	0.156 in (nom.)
E	9.53 mm (nom.)	0.375 in (nom.)
F	3.18 ± 0.13 mm	0.125 ± 0.005 in
Mass	(approximate)	0.94 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.101 cm ²
	L _e - Eff. Mag. Path Length	2.86 cm
	V _e - Eff. Core Volume	0.288 cm ³
	WA - Min. Eff. Window Area	0.247 cm ²
	sa - Surface Area	5.45 cm ²
	mlt - mean length per turn	2.54 cm
Inductance	μ _i (reference)	35
	A _L value (nominal)	20.5 nH/N ²
	Test Winding	N=100, #28 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.045 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=1.90E+09, b=2.00E+08, c=9.00E+05, d=5.00E-15	
	B _{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	32 mW/cm ³
Core Loss (maximum)	36 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=3.49E-06, c=1.43, d=0.00	
	H _{DC}	200 Oe
	Percent Initial Perm(nom.)	60.1%
Percent Initial Perm(min.)	53.7%	
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	10,000 Halves/Box

Winding Table	Wire Size	AWG	20	22	24	26	28	30	32	34	36	38	40
		mm	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080
	Full Winding	Turns	18	28	44	68	105	162	251	389	602	931	1,442
	Rdc(Ω)		15.2 m	37.6 m	94.1 m	231.2 m	567.7 m	1.4	3.4	8.5	20.8	51.2	126.2

