



Part Number: **E162-40**
Revision 20160713 - Generated 2016-Aug-15



A	41.28 ± 0.38 mm	1.625 ± 0.015 in
B	17.04 ± 0.20 mm	0.671 ± 0.008 in
C	12.70 ± 0.18 mm	0.500 ± 0.007 in
D	10.69 mm (nom.)	0.421 in (nom.)
E	28.58 mm (nom.)	1.125 in (nom.)
F	12.70 ± 0.18 mm	0.500 ± 0.007 in
Mass	(approximate)	47 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.61 cm ²
	L _e - Eff. Mag. Path Length	8.41 cm
	V _e - Eff. Core Volume	13.6 cm ³
	WA - Min. Eff. Window Area	1.68 cm ²
	sa - Surface Area	55.2 cm ²
	mlt - mean length per turn	8.26 cm
	Inductance	μ _i (reference)
A _L value (nominal)		175 nH/N ²
Test Winding		N=100, #20 AWG
Frequency		10 kHz
Voltage on Agilent 4284A		0.71 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%
Coating/Pkg	Coating Type:	None, Green/Yellow Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	300 Halves/Box

Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Full Winding	Turns	14	22	34	52	80	124	193	298	461	714	1,105
		Rdc(Ω)	3.8 m	9.4 m	23.2 m	56.5 m	138.2 m	340.6 m	843.0 m	2.1	5.1	12.5	30.9

