



Part Number: **E220-40/G020**
Revision 20160713 - Generated 2016-Aug-15



A	56.13 ± 0.38 mm	2.210 ± 0.015 in
B	27.69 ± 0.20 mm	1.090 ± 0.008 in
C	20.83 ± 0.25 mm	0.820 ± 0.010 in
D	19.18 mm (nom.)	0.755 in (nom.)
E	38.61 mm (nom.)	1.520 in (nom.)
F	17.27 ± 0.18 mm	0.680 ± 0.007 in
Mass	(approximate)	160 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	3.60 cm ²
	L _e - Eff. Mag. Path Length	13.2 cm
	V _e - Eff. Core Volume	47.7 cm ³
	WA - Min. Eff. Window Area	4.06 cm ²
	sa - Surface Area	125 cm ²
	mlt - mean length per turn	11.9 cm
Inductance	μ _i (reference)	60
	A _L value (nominal)	168 nH/N ²
	Test Winding	N=100, #16 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.6 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, Green/Yellow Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	80 Halves/Box

Winding Table	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
	Full Winding	Turns	22	34	52	81	126	194	301	465	720	1,115	1,726
		Rdc(Ω)	5.4 m	13.2 m	32.1 m	79.6 m	197.0 m	482.4 m	1.2	2.9	7.2	17.7	43.7

