



Part Number: EMS-1205232-040

Revision 20160816 - Generated 2016-Aug-16



A	120 ± 1.80 mm	4.724 ± 0.071 in
B	52 ± 0.79 mm	2.047 ± 0.031 in
C	31.5 ± 0.64 mm	1.240 ± 0.025 in
D	31.5 mm (min.)	1.240 in (min.)
E	80.4 mm (min.)	3.165 in (min.)
F	39.6 ± 0.71 mm	1.559 ± 0.028 in
Mass	(approximate)	840 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	13.03 cm ²
	L _e - Eff. Mag. Path Length	23.78 cm
	V _e - Eff. Core Volume	310 cm ³
	WA - Min. Eff. Window Area	12.6 cm ²
	sa - Surface Area	449 cm ²
	mlt - mean length per turn	22.4 cm
Inductance	μ _i (reference)	40
	A _L value (nominal)	344 nH/N ²
	Test Winding	N=100, #14 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	5.8 V
A _L tolerance	±8%	
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=1.00E+06, b=6.80E+08, c=8.07E+06, d=2.16E-14	
	B _{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	338 mW/cm ³
Core Loss (maximum)	388 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=0.01, b=2.54E-06, c=1.68, d=0.00	
	H _{DC}	100 Oe
	Percent Initial Perm(nom.)	63.2%
Percent Initial Perm(min.)	55.9%	
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	16 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	68	105	163	252	391	605	936	1,449	2,242	3,470	5,371
	Rdc(Ω)		31.3 m	76.8 m	189.7 m	466.5 m	1.2	2.8	7.0	17.2	42.2	103.9	255.9

