



Part Number: EMS-0251007-040

Revision 20160816 - Generated 2016-Aug-16



A	25.4 ± 0.38 mm	1.000 ± 0.015 in
B	9.5 ± 0.18 mm	0.374 ± 0.007 in
C	6.5 ± 0.10 mm	0.256 ± 0.004 in
D	6.2 mm (min.)	0.244 in (min.)
E	18.8 mm (min.)	0.740 in (min.)
F	6.2 ± 0.13 mm	0.244 ± 0.005 in
Mass	(approximate)	5.1 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.385 cm ²
	L _e - Eff. Mag. Path Length	4.85 cm
	V _e - Eff. Core Volume	1.87 cm ³
	WA - Min. Eff. Window Area	0.773 cm ²
	sa - Surface Area	19.4 cm ²
mlt - mean length per turn	5.06 cm	
Inductance	μ _i (reference)	40
	A _L value (nominal)	52 nH/N ²
	Test Winding	N=100, #24 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.17 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	840 Halves/Box

Winding Table	Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
		mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
	Full Winding	Turns	15	24	37	57	89	137	213	329	509	788	1,219
		Rdc(Ω)	6.3 m	16.0 m	39.2 m	96.0 m	238.3 m	583.4 m	1.4	3.5	8.7	21.5	52.8

