



Part Number: EMS-0432120-090

Revision 20160816 - Generated 2016-Aug-16



A	42.8 ± 0.64 mm	1.685 ± 0.025 in
B	21.1 ± 0.33 mm	0.831 ± 0.013 in
C	20 ± 0.25 mm	0.787 ± 0.010 in
D	15 mm (min.)	0.591 in (min.)
E	30.4 mm (min.)	1.197 in (min.)
F	11.9 ± 0.25 mm	0.469 ± 0.010 in
Mass	(approximate)	69 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	2.37 cm ²
	L _e - Eff. Mag. Path Length	9.84 cm
	V _e - Eff. Core Volume	23.3 cm ³
	WA - Min. Eff. Window Area	2.74 cm ²
	sa - Surface Area	81.3 cm ²
	mlt - mean length per turn	10.1 cm
Inductance	μ _i (reference)	90
	A _L value (nominal)	281 nH/N ²
	Test Winding	N=100, #18 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	1.1 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=1.46E+09, b=8.28E+08, c=4.62E+06, d=1.09E-14	
	B _{pk}	1000 G
	frequency	50 kHz
	Core Loss (nominal)	345 mW/cm ³
Core Loss (maximum)	396 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=1.26E-05, c=1.70, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm(nom.)	50.6%
Percent Initial Perm(min.)	42.9%	
Coating/Pkg	Coating Type:	None
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	140 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	15	23	35	55	85	131	203	314	486	752	1,164
	Rdc(Ω)		3.1 m	7.6 m	18.3 m	45.9 m	112.7 m	276.2 m	680.8 m	1.7	4.1	10.1	25.0

