



Part Number: **MS-132147-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core) (max. - after coating)	33.02 mm 33.83 mm	1.300 in 1.332 in
ID	(nom. - bare core) (min. - after coating)	19.94 mm 19.30 mm	0.785 in 0.760 in
Ht	(nom. - bare core) (max. - after coating)	11.18 mm 11.99 mm	0.440 in 0.472 in
Mass	(approximate)	34 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.698 cm ²	
	L _e - Eff. Mag. Path Length	8.15 cm	
	V _e - Eff. Core Volume	5.69 cm ³	
	WA - Min. Eff. Window Area	2.93 cm ²	
	sa - Surface Area	40.6 cm ²	
	mlt - mean length per turn	4.82 cm	
Inductance	μ _i (reference)	147	
	A _L value (nominal)	158 nH/N ²	
	Test Winding	N=70, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.22 V	
AL 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=5.176E+08, b=1.028E+09, c=9.893E+06, d=2.852E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	279 mW/cm ³	
Core Loss (maximum)	321 mW/cm ³		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.000E-02, b=4.732E-05, c=1.539, d=0.000		
	H _{DC}	40 Oe	
	Percent Initial Perm (nom.)	42.0%	
Percent Initial Perm (min.)	35.3%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	448 Pcs/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
	Single Layer	Turns	14	18	22	29	36	46	58	73	91	114	142
		Rdc(Ω)	1.4 m	2.8 m	5.5 m	11.6 m	22.8 m	46.3 m	92.9 m	186.0 m	368.8 m	734.8 m	1.5
Full Winding	Turns	15	24	37	57	88	136	211	326	504	780	1,208	
	Rdc(Ω)	1.5 m	3.8 m	9.3 m	22.7 m	55.7 m	137.0 m	338.1 m	830.8 m	2.0	5.0	12.4	

