



Part Number: **MS-026147-8**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core) (max. - after coating)	6.60 mm 7.32 mm	0.260 in 0.288 in
ID	(nom. - bare core) (min. - after coating)	2.67 mm 2.21 mm	0.105 in 0.087 in
Ht	(nom. - bare core) (max. - after coating)	4.78 mm 5.54 mm	0.188 in 0.218 in
Mass	(approximate)	0.74 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0920 cm ²	
	L _e - Eff. Mag. Path Length	1.36 cm	
	V _e - Eff. Core Volume	0.125 cm ³	
	WA - Min. Eff. Window Area	0.0384 cm ²	
	sa - Surface Area	2.44 cm ²	
	mlt - mean length per turn	1.73 cm	
Inductance	μ _i (reference)	147	
	A _L value (nominal)	122 nH/N ²	
	Test Winding	N=35, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.014 V	
	AL tolerance	±12%	
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:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	14,400 Pcs/Box	

Winding Table	Wire Size	AWG	26	28	30	32	34	36	38	40	42	44	-
		mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-
	Single Layer	Turns	11	14	18	23	29	37	47	59	74	93	-
		Rdc(Ω)	25.5 m	51.5 m	105.4 m	214.2 m	429.4 m	871.4 m	1.8	3.5	7.0	14.0	-
Full Winding	Turns	10	16	25	38	59	91	141	218	337	522	-	
	Rdc(Ω)	23.1 m	58.9 m	146.4 m	353.8 m	873.7 m	2.1	5.3	13.0	31.9	78.6	-	

