



Part Number: MP-601173-2
Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	152.40 mm	6.000 in
	(max. - after coating)	153.90 mm	6.059 in
ID	(nom. - bare core)	81.28 mm	3.200 in
	(min. - after coating)	79.65 mm	3.136 in
Ht	(nom. - bare core)	25.40 mm	1.000 in
	(max. - after coating)	26.80 mm	1.055 in
Mass	(approximate)	2,500 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	8.81 cm ²	
	L _e - Eff. Mag. Path Length	35.97 cm	
	V _e - Eff. Core Volume	317 cm ³	
	WA - Min. Eff. Window Area	49.8 cm ²	
	sa - Surface Area	674 cm ²	
	mlt - mean length per turn	16.8 cm	
Inductance	μ _i (reference)	173	
	A _L value (nominal)	549 nH/N ²	
	Test Winding	N=200, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	7.8 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=3.167E+10, b=1.206E+09, c=9.656E+06, d=5.636E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	312 mW/cm ³	
Core Loss (maximum)	359 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=1.313E-05, c=1.935, d=0.000		
	H _{DC}	30 Oe	
	Percent Initial Perm (nom.)	51.4%	
Percent Initial Perm (min.)	42.6%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	4 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	65	81	102	127	159	198	247	309	385	479	597
		Rdc(Ω)	22.4 m	44.4 m	88.9 m	176.1 m	350.7 m	694.5 m	1.4	2.7	5.4	10.7	21.3
Full Winding	Turns	261	404	625	967	1,497	2,316	3,585	5,549	8,589	13,293	20,574	
	Rdc(Ω)	90.0 m	221.5 m	545.0 m	1.3	3.3	8.1	20.0	49.2	121.2	298.3	734.3	

