



Part Number: **MS-775040-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core) (max. - after coating)	196.85 mm 198.37 mm	7.750 in 7.810 in
ID	(nom. - bare core) (min. - after coating)	146.05 mm 144.53 mm	5.750 in 5.690 in
Ht	(nom. - bare core) (max. - after coating)	25.40 mm 26.92 mm	1.000 in 1.060 in
Mass	(approximate)	1,840 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	6.26 cm ²	
	L _e - Eff. Mag. Path Length	53.86 cm	
	V _e - Eff. Core Volume	337 cm ³	
	WA - Min. Eff. Window Area	164.1 cm ²	
	sa - Surface Area	1,144 cm ²	
	mlt - mean length per turn	18.0 cm	
Inductance	μ _i (reference)	40	
	A _L value (nominal)	58.5 nH/N ²	
	Test Winding	N=100, #18 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	2.8 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=1.000E+06, b=6.961E+08, c=5.397E+06, d=4.127E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	441 mW/cm ³	
Core Loss (maximum)	507 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=2.655E-06, c=1.703, d=0.000		
	H _{DC}	100 Oe	
	Percent Initial Perm (nom.)	59.6%	
Percent Initial Perm (min.)	52.0%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	3 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	120	150	187	233	291	362	451	562	700	872	1,085
		Rdc(Ω)	44.4 m	88.3 m	175.0 m	346.8 m	688.9 m	1.4	2.7	5.4	10.6	21.0	41.6
Full Winding	Turns	859	1,329	2,057	3,184	4,928	7,627	11,804	18,270	28,277	43,766	67,739	
	Rdc(Ω)	317.8 m	782.1 m	1.9	4.7	11.7	28.7	70.7	174.0	428.2	1.1 k	2.6 k	

