



Part Number: **MS-300060-2**

Revision 2021-Dec-01 - Generated 2021-Dec-01



(If coated, Max./Min. includes coating)

OD	(nom. - bare core) (max.)	77.80 mm 78.94 mm	3.063 in 3.108 in										
ID	(nom. - bare core) (min.)	49.23 mm 47.96 mm	1.938 in 1.888 in										
HT	(nom. - bare core) (max.)	12.70 mm 13.97 mm	0.500 in 0.550 in										
Mass	(approximate)	200 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.77 cm ²											
	L _e - Eff. Mag. Path Length	19.612 cm											
	V _e - Eff. Core Volume	34.8 cm ³											
	WA - Min. Eff. Window Area	18.1 cm ²											
	sa - Surface Area	184 cm ²											
Inductance	μ _i (reference)	60											
	A _L value (nominal)	68 nH/N ²											
Core Loss	Test Winding	N=120, #18 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.94 V											
	AL tolerance	±8%											
	Core Loss(mW/cm ³):	$\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$											
DC Saturation	where B _{pk} expressed in gauss, f expressed in hertz, and: a=7.890E+09, b=7.111E+08, c=8.980E+06, d=2.846E-14												
	B _{pk}	1000 G											
	frequency	50 kHz											
	Core Loss (nominal)	323 mW/cm ³											
	Core Loss (maximum)	372 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=2.151E-06, c=1.841, d=0.000												
	H _{DC}	100 Oe											
Coating/Pkg	Percent Initial Perm(nom.)	49.2%											
	Percent Initial Perm(min.)	40.9%											
	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
Winding Table	Limit	0.1 mA, 5 s											
	Package Quantity	45 Pcs/Box											
	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	38	48	60	75	95	118	148	185	230	287	358	
	Rdc(Ω)	6.5 m	13.0 m	25.9 m	51.4 m	103.6 m	204.6 m	408.2 m	811.5 m	1.6	3.2	6.3	
Full Winding	Turns	95	146	227	351	543	840	1,300	2,012	3,114	4,820	7,459	
	Rdc(Ω)	16.2 m	39.6 m	97.9 m	240.7 m	592.1 m	1.5	3.6	8.8	21.7	53.5	131.6	

