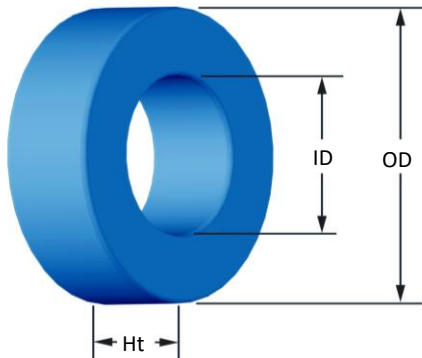




Part Number:

MS-080160-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	20.32 mm 21.08 mm	0.800 in 0.830 in										
ID	(nom. - bare core) (min.)	12.70 mm 12.07 mm	0.500 in 0.475 in										
HT	(nom. - bare core) (max.)	6.35 mm 7.11 mm	0.250 in 0.280 in										
Mass	(approximate)	6.8 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.226 cm ²											
	L _e - Eff. Mag. Path Length	5.09 cm											
	V _e - Eff. Core Volume	1.15 cm ³											
	WA - Min. Eff. Window Area	1.14 cm ²											
	sa - Surface Area	15.5 cm ²											
Inductance	mlt - mean length per turn	2.93 cm											
	μ _i (reference)	160											
	A _L value (nominal)	87 nH/N ²											
	Test Winding	N=90, #28 AWG											
	Frequency	10 kHz											
Core Loss	Voltage on Agilent 4284A	0.090 V											
	AL tolerance	±8%											
	Core Loss(mW/cm³):	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$											
	where B _{pk} expressed in gauss, f expressed in hertz, and:	a=1.394E+10, b=1.034E+09, c=1.244E+07, d=4.007E-14											
	B _{pk}	1000 G											
DC Saturation	frequency	50 kHz											
	Core Loss (nominal)	276 mW/cm³											
	Core Loss (maximum)	318 mW/cm³											
	%μ _i	$\frac{1}{a + b \cdot H^c} + d$											
	where H expressed in oersteds, and:	a=1.000E-02, b=4.439E-05, c=1.627, d=0.000											
Coating/Pkg	H _{DC}	40 Oe											
	Percent Initial Perm(nom.)	35.8%											
	Percent Initial Perm(min.)	29.3%											
	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
Winding Table	Limit	0.1 mA, 5 s											
	Package Quantity	1,800 Pcs/Box											
	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
	mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	
	Single Layer	Turns	10	13	17	22	28	35	44	56	70	88	110
R _{dc} (Ω)	1.0 m	2.0 m	4.1 m	8.5 m	17.1 m	34.1 m	68.1 m	137.9 m	274.2 m	548.2 m	1.1		
Full Winding	Turns	9	14	22	34	53	82	127	197	305	472	731	
R _{dc} (Ω)	0.9 m	2.1 m	5.3 m	13.1 m	32.4 m	79.8 m	196.7 m	485.2 m	1.2	2.9	7.2		

