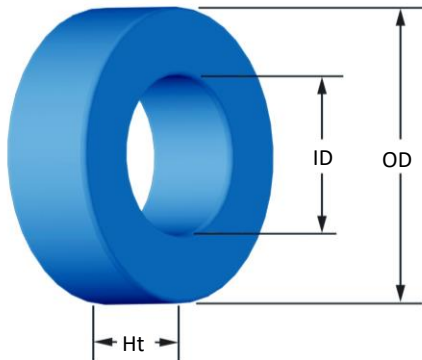




Part Number:

MS-080014-2

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



(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)	5.6 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)	14	
	A_L value (nominal)	7.8 nH/N ²	
	Test Winding	N=90, #28 AWG	
	Frequency	10 kHz	
Core Loss	Voltage on Agilent 4284A	0.090 V	
	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.000E+06$, $b=1.814E+08$, $c=3.377E+06$, $d=2.628E-14$		
	B_{pk}	300 G	
DC Saturation	frequency	100 kHz	
	Core Loss (nominal)	180 mW/cm ³	
	Core Loss (maximum)	207 mW/cm ³	
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=9.443E-07$, $c=1.533$, $d=0.000$		
Coating/Pkg	H_{dc}	200 Oe	
	Percent Initial Perm(nom.)	75.9%	
	Percent Initial Perm(min.)	70.4%	
	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
	Single Layer	Turns	2.500 2.000 1.600 1.250 1.000 0.800 0.630 0.500 0.400 0.315 0.250
	Full Winding	Rdc(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
	Turns	9 14 22 34 53 82 127 197 305 472 731	
	Rdc(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	

