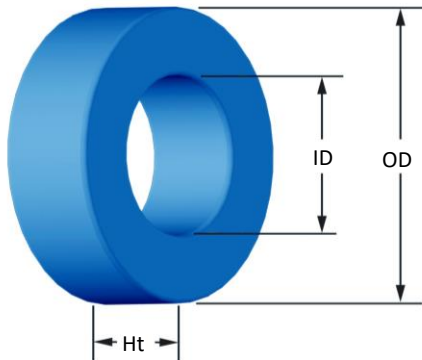




Part Number:

MS-080147-2

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	
	W_A - Min. Eff. Window Area	1.14 cm ²	
	S_A - Surface Area	15.5 cm ²	
Inductance	μ_i (reference)	147	
	A_L value (nominal)	81 nH/N ²	
	Test Winding	N=90, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.090 V	
Core Loss	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: $a=1.394E+10$, $b=1.034E+09$, $c=1.244E+07$, $d=4.007E-14$		
	B_{pk}	1000 G	
	frequency	50 kHz	
DC Saturation	Core Loss (nominal)	276 mW/cm ³	
	Core Loss (maximum)	318 mW/cm ³	
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=4.732E-05$, $c=1.539$, $d=0.000$		
	H_{DC}	40 Oe	
Coating/Pkg	Percent Initial Perm(nom.)	42.0%	
	Percent Initial Perm(min.)	35.3%	
	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	
	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	
Full Winding	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	

