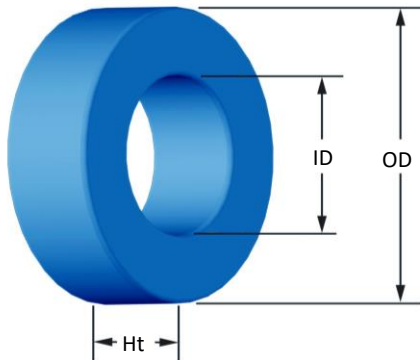




Part Number:

MS-040160-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	10.16 mm 10.80 mm	0.400 in 0.425 in
ID	(nom. - bare core) (min.)	5.08 mm 4.57 mm	0.200 in 0.180 in
HT	(nom. - bare core) (max.)	3.96 mm 4.57 mm	0.156 in 0.180 in
Mass	(approximate)	1.4 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.100 cm ²	
	L_e - Eff. Mag. Path Length	2.38 cm	
	V_e - Eff. Core Volume	0.238 cm ³	
	W_A - Min. Eff. Window Area	0.164 cm ²	
	S_A - Surface Area	4.20 cm ²	
Inductance	μ_i (reference)	160	
	A_L value (nominal)	84 nH/N ²	
	Test Winding	N=55, #30 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.024 V	
Core Loss	AL tolerance	±12%	
	Core Loss(mW/cm ³):	$\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$	
	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:	$a=1.000E-02$, $b=4.439E-05$, $c=1.627$, $d=0.000$	
	H_{DC}	40 Oe	
Coating/Pkg	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	9,000 Pcs/Box	
	Wire Size	AWG	20 22 24 26 28 30 32 34 36 38 40
	Single Layer	Turns	12 15 19 25 32 40 50 63 80 100 125
Full Winding	Rdc(Ω)	7.0 m 14.0 m 28.2 m 59.1 m 120.3 m 239.1 m 475.2 m 952.3 m 1.9 3.8 7.6	
	Turns	12 18 28 44 68 105 162 251 389 602 931	
	Rdc(Ω)	7.0 m 16.8 m 41.6 m 104.0 m 255.5 m 627.5 m 1.5 3.8 9.4 23.0 56.6	

