

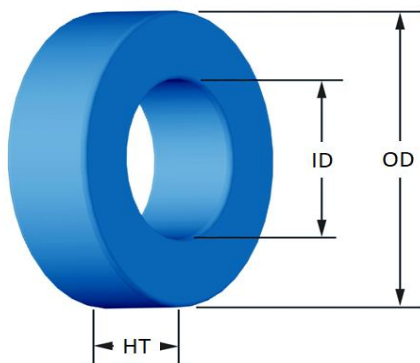


Part Number:

MS-200075-2

Revision:

2023-Dec-06



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

(If coated, Max./Min. includes coating)		mm	in			
OD	(nom. - bare core)	50.80	2.000			
	(max.)	51.69	2.035			
ID	(nom. - bare core)	31.75	1.250			
	(min.)	30.94	1.218			
HT	(nom. - bare core)	13.46	0.530			
	(max.)	14.35	0.565			
Mass	(approximate)	93	grams			
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.25	cm ²			
	L _e - Eff. Mag. Path Length	12.733	cm			
	V _e - Eff. Core Volume	15.9	cm ³			
	W _A - Min. Eff. Window Area	7.52	cm ²			
	s _a - Surface Area	88.2	cm ²			
	mlt - mean length per turn	6.49	cm			
Inductance	μ _i (reference)	75				
	A _L value (nominal)	91	nH/N ²			
	Test Winding	70 Turns	AWG# 18			
	Frequency	10k	Hz			
	Voltage on Agilent 4284A	0.39	V			
	AL tolerance	±8%				
Core Loss	$\text{Core Loss(mW/cm}^3\text{)}=\frac{a}{B_{pk}^3}+\frac{b}{B_{pk}^{2.3}}+\frac{c}{B_{pk}^{1.65}}+d\cdot B_{pk}^2\cdot f^2$					
	where <i>B_{pk}</i> expressed in gauss, <i>f</i> expressed in hertz, and: <i>a</i> =7.890E+09, <i>b</i> =7.111E+08, <i>c</i> =8.980E+06, <i>d</i> =2.846E-14					
	B _{pk}	1000	G			
	frequency	50 k	Hz			
	Core Loss (nominal)	323	mW/cm ³			
	Core Loss (maximum)	372	mW/cm ³			
DC Saturation	%μ _i $\frac{1}{a+b\cdot H^c}+d$					
	where H expressed in oersteds, and: <i>a</i> =1.000E-02, <i>b</i> =3.414E-06, <i>c</i> =1.841, <i>d</i> =0.000					
	H _{dc}	80	Oe			
	Percent Initial Perm.(nom.)	47.9	%			
Coating/Pkg	Coating Type:	Blue Epoxy				
	Voltage Breakdown (min.)	1000 Vrms				
	Limit	0.1 mA, 5 s				
	Package Quantity	60 Pcs/Box				
Winding Table	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
	Single Layer	Turns	23	30	38	
		Rdc(Ω)	3.1 m	6.4 m	12.8 m	2
	Full Winding	Turns	39	61	94	
		Rdc(Ω)	5.2 m	12.9 m	31.7 m	

