

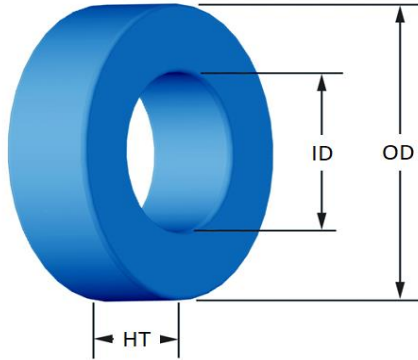


Part Number:

MS-157075-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	39.88	1.570
	(max.)	40.69	1.602
ID	(nom. - bare core)	24.13	0.950
	(min.)	23.32	0.918
HT	(nom. - bare core)	14.48	0.570
	(max.)	15.37	0.605
Mass	(approximate)	62	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.07	cm ²
	L_e - Eff. Mag. Path Length	9.85	cm
	V_e - Eff. Core Volume	10.5	cm ³
	W_A - Min. Eff. Window Area	4.27	cm ²
	s_a - Surface Area	60.2	cm ²
Inductance	m_l - mean length per turn	5.98	cm
	μ_i (reference)	75	
	A_L value (nominal)	101	nH/N ²
	Test Winding	70 Turns	AWG# 20
	Frequency	10k	Hz
Core Loss	Voltage on Agilent 4284A	0.33	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: $a=7.890E+09$, $b=7.111E+08$, $c=8.980E+06$, $d=2.846E-14$		
	B_{pk}	1000	G
DC Saturation	frequency	50 k	Hz
	Core Loss (nominal)	323	mW/cm ³
	Core Loss (maximum)	372	mW/cm ³
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=3.414E-06$, $c=1.841$, $d=0.000$		
Coating/Pkg	H_{dc}	80	Oe
	Percent Initial Perm(nom.)	47.9	%
	Percent Initial Perm(min.)	39.6	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000	Vrms
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	180 Pcs/Box	
	Wire Size	AWG	8
		mm	3.150
	Single Layer	Turns	17
		Rdc(Ω)	2.1 m
	Full Winding	Turns	22
		Rdc(Ω)	2.7 m

