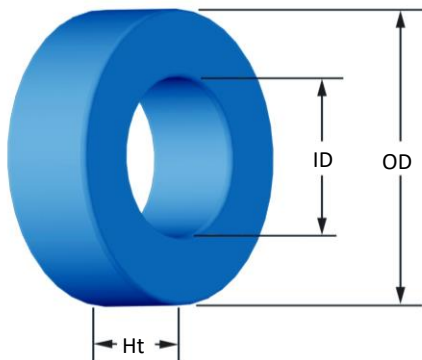




Part Number:

MS-039090-8

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



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

OD	(nom. - bare core) (max.)	9.65 mm 10.29 mm	0.380 in 0.405 in
ID	(nom. - bare core) (min.)	4.78 mm 4.27 mm	0.188 in 0.168 in
HT	(nom. - bare core) (max.)	3.18 mm 3.81 mm	0.125 in 0.150 in
Mass	(approximate)	0.97 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0752 cm ²	
	L _e - Eff. Mag. Path Length	2.18 cm	
	V _e - Eff. Core Volume	0.164 cm ³	
	W _A - Min. Eff. Window Area	0.143 cm ²	
	s _a - Surface Area	3.61 cm ²	
Inductance	mlt - mean length per turn	1.58 cm	
	μ _i (reference)	90	
	A _L value (nominal)	38 nH/N ²	
	Test Winding	N=45, #30 AWG	
	Frequency	10 kHz	
Core Loss	Voltage on Agilent 4284A	0.015 V	
	AL tolerance	±12%	
	Core Loss(mW/cm ³):	$\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$	
	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 kHz	
	Core Loss (nominal)	323 mW/cm ³	
	Core Loss (maximum)	372 mW/cm ³	
	%μ _i	$\frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and:	a=1.000E-02, b=3.994E-06, c=1.883, d=0.000	
Coating/Pkg	H _{DC}	50 Oe	
	Percent Initial Perm.(nom.)	61.3%	
	Percent Initial Perm.(min.)	52.9%	
	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	10,800 Pcs/Box	
	Wire Size	AWG	20
		mm	0.800
	Single Layer	Turns	11
Winding Table		R _{dc} (Ω)	5.8 m
		Turns	16
		R _{dc} (Ω)	13.4 m
		Turns	25
		R _{dc} (Ω)	33.2 m
Winding Table		Turns	38
		R _{dc} (Ω)	80.2 m
		Turns	59
		R _{dc} (Ω)	198.1 m
		Turns	92

