

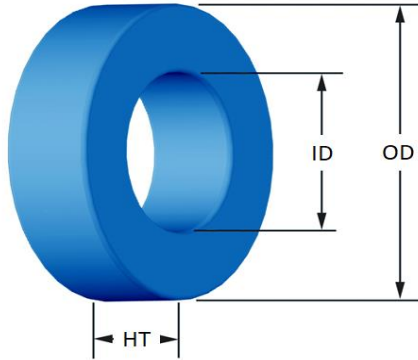


Part Number:

MS-141090-2

Revision:

2023-Dec-06



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

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OD	(nom. - bare core)		35.81	1.410		
	(max.)		36.63	1.442		
ID	(nom. - bare core)		22.35	0.880		
	(min.)		21.54	0.848		
HT	(nom. - bare core)		10.46	0.412		
	(max.)		11.28	0.444		
Mass	(approximate)		36	grams		
Magnetic Dimensions	A _e - Eff. Mag. Cross Section		0.678	cm ²		
	L _e - Eff. Mag. Path Length		8.98	cm		
	V _e - Eff. Core Volume		6.09	cm ³		
	W _A - Min. Eff. Window Area		3.64	cm ²		
	s _a - Surface Area		45.6	cm ²		
	mlt - mean length per turn		4.84	cm		
Inductance	μ _i (reference)		90			
	A _L value (nominal)		84.3	nH/N ²		
	Test Winding		80 Turns	AWG# 22		
	Frequency		10k	Hz		
	Voltage on Agilent 4284A		0.24	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	$\% \mu_i \frac{1}{a+b\cdot H^c}+d$					
	where H expressed in oersteds, and: <i>a</i> =1.000E-02, <i>b</i> =3.994E-06, <i>c</i> =1.883, <i>d</i> =0.000					
	H _{DC}	50	Oe			
	Percent Initial Perm.(nom.)	61.3	%			
	Percent Initial Perm.(min.)	52.9	%			
Coating/Pkg	Coating Type:		Blue Epoxy			
	Voltage Breakdown (min.)		1000 Vrms			
	Limit		0.1 mA, 5 s			
	Package Quantity		315 Pcs/Box			
Winding Table	Wire Size	AWG	8	10	12	
		mm	3.150	2.500	2.000	
	Single Layer	Turns	15	20	25	
		Rdc(Ω)	1.5 m	3.2 m	6.3 m	
	Full Winding	Turns	19	30	46	
		Rdc(Ω)	1.9 m	4.8 m	11.6 m	

