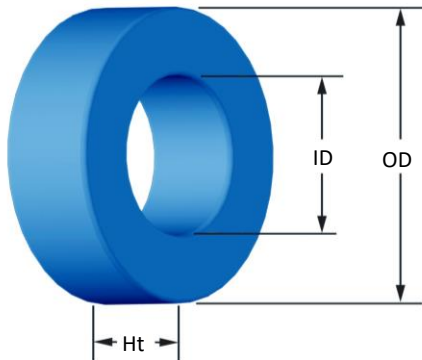




Part Number:

MS-015090-8

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



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

OD	(nom. - bare core) (max.)	3.94 mm 4.14 mm	0.155 in 0.163 in
ID	(nom. - bare core) (min.)	2.21 mm 2.01 mm	0.087 in 0.079 in
HT	(nom. - bare core) (max.)	2.54 mm 2.74 mm	0.100 in 0.108 in
Mass	(approximate)	0.12 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0211 cm ²	
	L_e - Eff. Mag. Path Length	0.942 cm	
	V_e - Eff. Core Volume	0.0197 cm ³	
	W_A - Min. Eff. Window Area	0.0317 cm ²	
	S_a - Surface Area	0.776 cm ²	
Inductance	μ_i (reference)	90	
	A_L value (nominal)	25 nH/N ²	
	Test Winding	N=30, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.003 V	
Core Loss	AL tolerance	±15%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	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	
	frequency	50 kHz	
DC Saturation	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: $a=1.000E-02$, $b=3.994E-06$, $c=1.883$, $d=0.000$		
	H_{DC}	50 Oe	
Coating/Pkg	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	27,000 Pcs/Box	
	Wire Size	AWG	28
		mm	0.315
Single Layer	Turns	12	16
	Rdc(Ω)	22.0 m	46.7 m
	Turns	13	20
	Rdc(Ω)	23.8 m	58.3 m
Full Winding	Turns	31	49
	Rdc(Ω)	143.8 m	361.4 m
	Turns	32	49
	Rdc(Ω)	143.8 m	361.4 m

