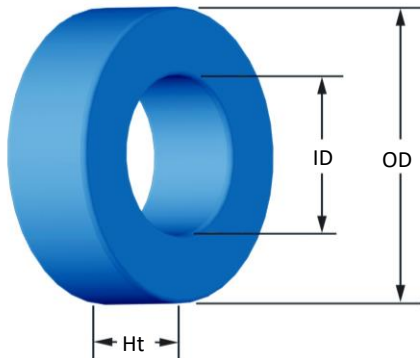




Part Number:

MS-027160-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	6.60 mm 7.24 mm	0.260 in 0.285 in
ID	(nom. - bare core) (min.)	2.67 mm 2.29 mm	0.105 in 0.090 in
HT	(nom. - bare core) (max.)	2.54 mm 3.18 mm	0.100 in 0.125 in
Mass	(approximate)	0.38 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0467 cm ²	
	L_e - Eff. Mag. Path Length	1.36 cm	
	V_e - Eff. Core Volume	0.0640 cm ³	
	W_A - Min. Eff. Window Area	0.0412 cm ²	
	S_A - Surface Area	1.83 cm ²	
Inductance	μ_i (reference)	160	
	A_L value (nominal)	69 nH/N ²	
	Test Winding	N=35, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.007 V	
Core Loss	AL tolerance	±12%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and: $a=1.394E+10$, $b=1.034E+09$, $c=1.244E+07$, $d=4.007E-14$		
	B_{pk}	1000 G	
	frequency	50 kHz	
DC Saturation	Core Loss (nominal)	276 mW/cm ³	
	Core Loss (maximum)	318 mW/cm ³	
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=4.439E-05$, $c=1.627$, $d=0.000$		
	H_{DC}	40 Oe	
Coating/Pkg	Percent Initial Perm(nom.)	35.8%	
	Percent Initial Perm(min.)	29.3%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	21,600 Pcs/Box	
	Wire Size	AWG 26 28 30 32 34 36 38 40 42 44 -	
	mm	0.400 0.315 0.250 0.200 0.160 0.125 0.100 0.080 0.063 0.050 -	
Single Layer	Turns	11 14 19 24 30 38 49 61 77 96 -	
	Rdc(Ω)	18.3 m 37.1 m 80.1 m 160.9 m 319.9 m 644.5 m 1.3 2.6 5.3 10.4 -	
	Full Winding	Turns 11 17 26 41 63 98 151 234 362 560 -	
	Rdc(Ω)	18.3 m 45.1 m 109.6 m 274.9 m 671.8 m 1.7 4.1 10.0 24.7 60.8 -	

