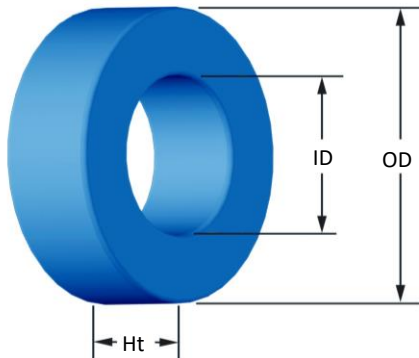




Part Number:

MS-031160-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	7.87 mm 8.51 mm	0.310 in 0.335 in
ID	(nom. - bare core) (min.)	3.96 mm 3.43 mm	0.156 in 0.135 in
HT	(nom. - bare core) (max.)	3.18 mm 3.81 mm	0.125 in 0.150 in
Mass	(approximate)	0.65 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0615 cm ²	
	L_e - Eff. Mag. Path Length	1.79 cm	
	V_e - Eff. Core Volume	0.110 cm ³	
	W_A - Min. Eff. Window Area	0.0924 cm ²	
	S_A - Surface Area	2.65 cm ²	
Inductance	μ_i (reference)	160	
	A_L value (nominal)	66 nH/N ²	
	Test Winding	N=45, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.012 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	14,400 Pcs/Box	
	Wire Size	AWG	22
		mm	0.630
Single Layer	Turns	11	14
	Rdc(Ω)	8.4 m	17.0 m
	Turns	10	16
	Rdc(Ω)	7.6 m	19.4 m
Full Winding	Turns	10	16
	Rdc(Ω)	7.6 m	19.4 m
	Turns	25	38
	Rdc(Ω)	116.6 m	287.9 m
Wire Size	Turns	30	59
	Rdc(Ω)	287.9 m	706.2 m
	Turns	32	91
	Rdc(Ω)	706.2 m	1.7
Wire Size	Turns	34	141
	Rdc(Ω)	1.7	4.3
	Turns	36	219
	Rdc(Ω)	4.3	10.6
Wire Size	Turns	38	339
	Rdc(Ω)	10.6	26.0
	Turns	40	524
	Rdc(Ω)	26.0	64.1
Wire Size	Turns	42	812
	Rdc(Ω)	64.1	

