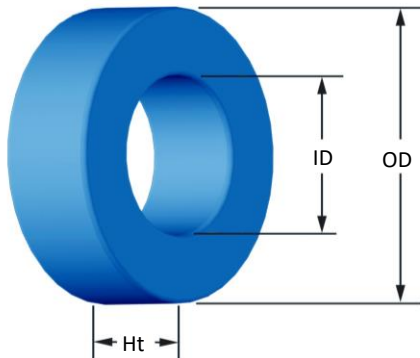




Part Number:

MS-050160-2

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	12.70 mm 13.46 mm	0.500 in 0.530 in
ID	(nom. - bare core) (min.)	7.62 mm 6.99 mm	0.300 in 0.275 in
HT	(nom. - bare core) (max.)	4.75 mm 5.51 mm	0.187 in 0.217 in
Mass	(approximate)	2.1 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.114 cm ²	
	L_e - Eff. Mag. Path Length	3.12 cm	
	V_e - Eff. Core Volume	0.356 cm ³	
	WA - Min. Eff. Window Area	0.384 cm ²	
	sa - Surface Area	6.67 cm ²	
	mlt - mean length per turn	2.10 cm	
Inductance	μ_i (reference)	160	
	A_L value (nominal)	72 nH/N ²	
	Test Winding	N=50, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.025 V	
Core Loss	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	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	5,400 Pcs/Box	
	Wire Size	AWG	16
		mm	1.250

		16	18	20	22	24	26	28	30	32	34	36
	Turns	11	15	19	24	31	39	50	63	79	98	123
	Rdc(Ω)	3.0 m	6.6 m	13.3 m	26.6 m	54.7 m	109.5 m	223.3 m	447.5 m	892.5 m	1.8	3.5
	Turns	12	18	28	43	66	102	158	245	380	587	909
	Rdc(Ω)	3.3 m	7.9 m	19.5 m	47.7 m	116.6 m	286.5 m	705.7 m	1.7	4.3	10.5	26.0

