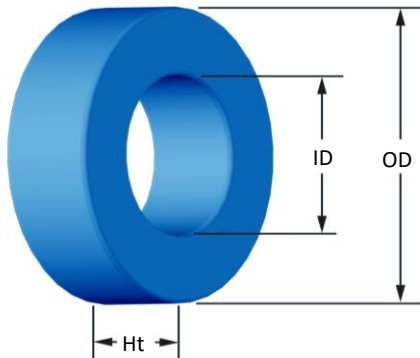




Part Number:

MS-080147-2H127

Revision 2022-Apr-28



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

OD	(nom. - bare core) (max.)	20.32 mm 21.08 mm	0.800 in 0.830 in
ID	(nom. - bare core) (min.)	12.70 mm 12.07 mm	0.500 in 0.475 in
HT	(nom. - bare core) (max.)	12.70 mm 13.46 mm	0.500 in 0.530 in
Mass	(approximate)	14 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.452 cm ²	
	L_e - Eff. Mag. Path Length	5.09 cm	
	V_e - Eff. Core Volume	2.30 cm ³	
	W_A - Min. Eff. Window Area	1.14 cm ²	
	S_A - Surface Area	20.3 cm ²	
Inductance	μ_i (reference)	147	
	A_L value (nominal)	162 nH/N ²	
	Test Winding	N=90, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.18 V	
Core Loss	AL tolerance	±8%	
	Core Loss(mW/cm ³):	$\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$	
	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: $a=1.000E-02, b=4.732E-05, c=1.539, d=0.000$	
	H_{DC}	40 Oe	
	Percent Initial Perm(nom.)	42.0%	
Coating/Pkg	Percent Initial Perm(min.)	35.3%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	900 Pcs/Box	

Winding Table	Wire Size	AWG	10	12	14	16	18	20	22	24	26	28	30
		mm	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250
	Single Layer	Turns	10	13	17	22	28	35	44	56	70	88	110
		Rdc(Ω)	1.4 m	2.8 m	5.9 m	12.1 m	24.6 m	48.9 m	97.7 m	197.8 m	393.2 m	786.0 m	1.6
	Full Winding	Turns	9	14	22	34	53	82	127	197	305	472	731
		Rdc(Ω)	1.2 m	3.1 m	7.6 m	18.8 m	46.5 m	114.5 m	282.0 m	695.7 m	1.7	4.2	10.4

