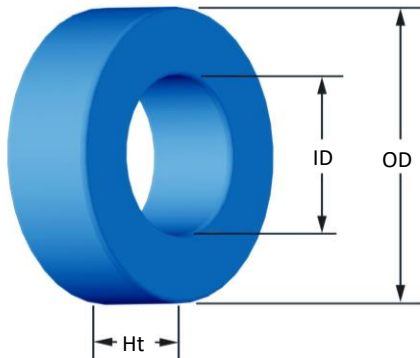




Part Number:

MS-080125-2H127

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



(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	
	WA - Min. Eff. Window Area	1.14 cm ²	
	sa - Surface Area	20.3 cm ²	
	mlt - mean length per turn	4.20 cm	
Inductance	μ _i (reference)	125	
	A _L value (nominal)	136 nH/N ²	
	Test Winding	N=90, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.18 V	
	AL tolerance	±8%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	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	
	Core Loss (nominal)	276 mW/cm ³	
	Core Loss (maximum)	318 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=7.884E-06$, $c=1.883$, $d=0.000$		
	H _{DC}	40 Oe	
	Percent Initial Perm.(nom.)	55.0%	
	Percent Initial Perm.(min.)	46.4%	
	Coating/Pkg	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	

