

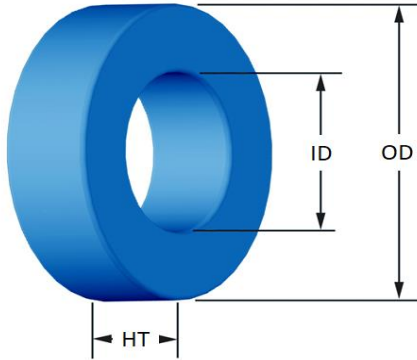


Part Number:

MS-068014-2H127

Revision:

2023-Dec-18



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

		mm	in
OD	(nom. - bare core)	17.27	0.680
	(max.)	18.03	0.710
ID	(nom. - bare core)	9.65	0.380
	(min.)	9.02	0.355
HT	(nom. - bare core)	12.70	0.500
	(max.)	13.46	0.530

Magnetic Dimensions	Mass (approximate)	9.4	grams
	A_e - Eff. Mag. Cross Section	0.464	cm ²
	L_e - Eff. Mag. Path Length	4.14	cm
	V_e - Eff. Core Volume	1.92	cm ³
	W_A - Min. Eff. Window Area	0.639	cm ²
	s_a - Surface Area	15.8	cm ²
Inductance	m_l - mean length per turn	4.04	cm
	μ_i (reference)	14	
	A_L value (nominal)	20	nH/N ²
	Test Winding	70 Turns	AWG# 28
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.14	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:		
	$a=1.000E+06$, $b=1.814E+08$, $c=3.377E+06$, $d=2.628E-14$		
	B_{pk}	300	G
	frequency	100 k	Hz
DC Saturation	Core Loss (nominal)	180	mW/cm ³
	Core Loss (maximum)	207	mW/cm ³
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	$a=1.000E-02$, $b=9.443E-07$, $c=1.533$, $d=0.000$		
	H_{dc}	200	Oe
Coating/Pkg	Percent Initial Perm(nom.)	75.9	%
	Percent Initial Perm(min.)	70.4	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	1,080 Pcs/Box	

Winding Table	Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
		mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
	Single Layer	Turns	12	15	20	26	32	41	52	65	82	102	128
	Full Winding	Rdc(Ω)	4.0 m	8.0 m	16.9 m	35.0 m	68.5 m	139.5 m	281.4 m	559.5 m	1.1	2.2	4.4
		Turns	12	19	30	46	71	110	170	264	408	632	978
		Rdc(Ω)	4.0 m	10.1 m	25.4 m	61.9 m	151.9 m	374.3 m	920.1 m	2.3	5.6	13.8	33.9

