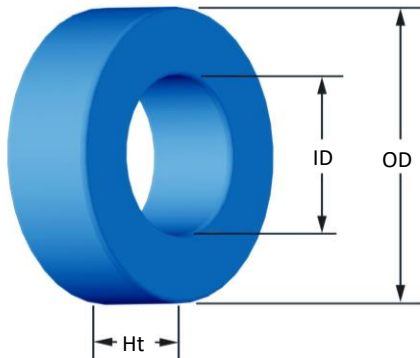




Part Number:

MS-050014-2H095

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



(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.)	9.50 mm 10.26 mm	0.374 in 0.404 in
Mass	(approximate)	3.5 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.228 cm ²	
	L _e - Eff. Mag. Path Length	3.12 cm	
	V _e - Eff. Core Volume	0.712 cm ³	
	WA - Min. Eff. Window Area	0.384 cm ²	
	sa - Surface Area	8.94 cm ²	
Inductance	mlt - mean length per turn	3.05 cm	
	μ _i (reference)	14	
	A _L value (nominal)	12.8 nH/N ²	
	Test Winding	N=50, #28 AWG	
	Frequency	10 kHz	
Core Loss	Voltage on Agilent 4284A	0.051 V	
	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	
DC Saturation	frequency	100 kHz	
	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		
Coating/Pkg	H _{DC}	200 Oe	
	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	2,700 Pcs/Box	
	Wire Size	AWG	16
		mm	1.250
			1.000

		AWG	16	18	20	22	24	26	28	30	32	34	36
		mm	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125
Single Layer	Turns	11	15	19	24	31	39	50	63	79	98	123	
	Rdc(Ω)	4.4 m	9.6 m	19.3 m	38.7 m	79.5 m	159.1 m	324.4 m	650.1 m	1.3	2.6	5.1	
Full Winding	Turns	12	18	28	43	66	102	158	245	380	587	909	
	Rdc(Ω)	4.8 m	11.5 m	28.4 m	69.4 m	169.3 m	416.2 m	1.0	2.5	6.2	15.3	37.7	

