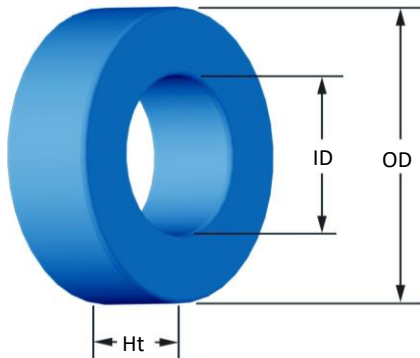




Part Number:

MS-050040-2H095

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)	3.9 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	
	W_A - Min. Eff. Window Area	0.384 cm ²	
	S_A - Surface Area	8.94 cm ²	
Inductance	μ_i (reference)	40	
	A_L value (nominal)	36 nH/N ²	
	Test Winding	N=50, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.051 V	
Core Loss	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	$a=1.000E+06$, $b=6.961E+08$, $c=5.397E+06$, $d=4.127E-14$		
	B_{pk}	1000 G	
DC Saturation	frequency	50 kHz	
	Core Loss (nominal)	441 mW/cm ³	
	Core Loss (maximum)	507 mW/cm ³	
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
Coating/Pkg	$a=1.000E-02$, $b=2.655E-06$, $c=1.703$, $d=0.000$		
	H_{DC}	100 Oe	
	Percent Initial Perm(nom.)	59.6%	
	Percent Initial Perm(min.)	52.0%	
	Coating Type:	Blue Epoxy	
Winding Table	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	2,700 Pcs/Box	

Wire Size	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

