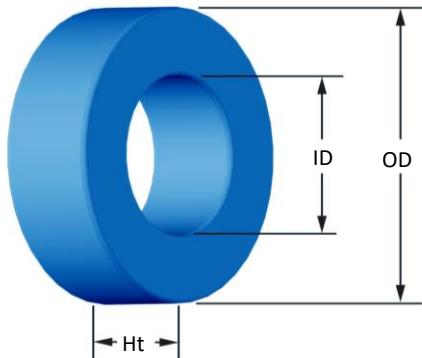




Part Number:

MS-025090-8

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



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

OD	(nom. - bare core) (max.)	6.35 mm 6.99 mm	0.250 in 0.275 in
ID	(nom. - bare core) (min.)	2.79 mm 2.29 mm	0.110 in 0.090 in
HT	(nom. - bare core) (max.)	2.79 mm 3.43 mm	0.110 in 0.135 in
Mass	(approximate)	0.38 grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0476 cm ²	
	L_e - Eff. Mag. Path Length	1.36 cm	
	V_e - Eff. Core Volume	0.0642 cm ³	
	W_A - Min. Eff. Window Area	0.0412 cm ²	
	S_a - Surface Area	1.80 cm ²	
	mlt - mean length per turn	1.27 cm	
Inductance	μ_i (reference)	90	
	A_L value (nominal)	36 nH/N ²	
	Test Winding	N=30, #32 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.006 V	
	A_L tolerance	±12%	
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:		
	$a=7.890E+09$, $b=7.111E+08$, $c=8.980E+06$, $d=2.846E-14$		
	B_{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	323 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	$a=1.000E-02$, $b=3.994E-06$, $c=1.883$, $d=0.000$		
	H_{DC}	50 Oe	
Coating/Pkg	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	21,600 Pcs/Box	

Winding Table	Wire Size	AWG	26	28	30	32	34	36	38	40	42	44	-
		mm	0.400	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-
	Single Layer	Turns	11	14	19	24	30	38	49	61	77	96	-
	Full Winding	Rdc(Ω)	18.7 m	37.9 m	81.7 m	164.2 m	326.3 m	657.4 m	1.3	2.7	5.4	10.6	-
		Turns	11	17	26	41	63	98	151	234	362	560	-
		Rdc(Ω)	18.7 m	46.0 m	111.8 m	280.4 m	685.3 m	1.7	4.2	10.2	25.2	62.0	-

