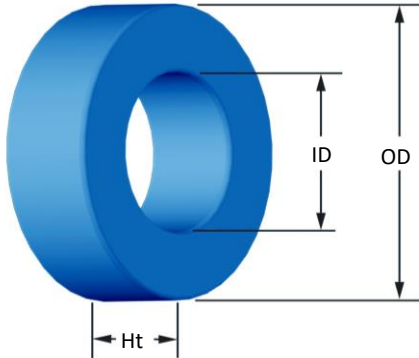




Part Number: MS-108090-2

Revision 2021-Nov-08 - Generated 2021-Nov-08



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

OD	(nom. - bare core)	26.92 mm	1.060 in
	(max.)	27.69 mm	1.090 in
ID	(nom. - bare core)	14.73 mm	0.580 in
	(min.)	14.10 mm	0.555 in
HT	(nom. - bare core)	14.00 mm	0.551 in
	(max.)	15.00 mm	0.591 in
Mass	(approximate)	31 grams	

Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.819 cm ²
	L _e - Eff. Mag. Path Length	6.35 cm
	V _e - Eff. Core Volume	5.20 cm ³
	WA - Min. Eff. Window Area	1.56 cm ²
	sa - Surface Area	31.7 cm ²
	mlt - mean length per turn	5.06 cm

Inductance	μ _i (reference)	90
	A _L value (nominal)	141 nH/N ²
	Test Winding	N=80, #26 AWG
	Frequency	10 kHz
	Voltage on Agilent 4284A	0.29 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=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
	Core Loss (maximum)	372 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
	Percent Initial Perm(nom.)	61.3%
	Percent Initial Perm(min.)	52.9%

Coating/Pkg	Coating Type:	Blue Epoxy
	Voltage Breakdown (min.)	1000 Vrms
	Limit	0.1 mA, 5 s
	Package Quantity	500 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	12	16	20	26	33	41	52	66	82	103	129
		Rdc(Ω)	2.0 m	4.2 m	8.4 m	17.3 m	35.0 m	69.1 m	139.3 m	281.3 m	555.8 m	1.1	2.2
Full Winding	Turns	13	20	30	47	73	112	174	269	417	645	998	
	Rdc(Ω)	2.2 m	5.3 m	12.6 m	31.3 m	77.3 m	188.7 m	466.2 m	1.1	2.8	7.0	17.1	

