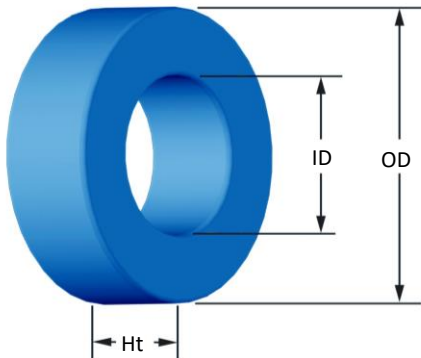




Part Number: **MS-130125-2**

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



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

OD	(nom. - bare core) (max.)	33.02 mm 33.83 mm	1.300 in 1.332 in										
ID	(nom. - bare core) (min.)	19.94 mm 19.30 mm	0.785 in 0.760 in										
HT	(nom. - bare core) (max.)	10.67 mm 11.61 mm	0.420 in 0.457 in										
Mass	(approximate)	32 grams											
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.672 cm ²											
	L _e - Eff. Mag. Path Length	8.15 cm											
	V _e - Eff. Core Volume	5.48 cm ³											
	WA - Min. Eff. Window Area	2.93 cm ²											
	sa - Surface Area	40.1 cm ²											
Inductance	μ _i (reference)	125											
	A _L value (nominal)	127 nH/N ²											
	Test Winding	N=70, #22 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	0.21 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=1.394E+10, b=1.034E+09, c=1.244E+07, d=4.007E-14												
	B _{pk}	1000 G											
	frequency	50 kHz											
DC Saturation	Core Loss (nominal)	276 mW/cm ³											
	Core Loss (maximum)	318 mW/cm ³											
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: a=1.000E-02, b=7.884E-06, c=1.883, d=0.000												
	H _{DC}	40 Oe											
Coating/Pkg	Percent Initial Perm(nom.)	55.0%											
	Percent Initial Perm(min.)	46.4%											
	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
Winding Table	Limit	0.1 mA, 5 s											
	Package Quantity	512 Pcs/Box											
	Wire Size	AWG	8	10	12	14	16	18	20	22	24	26	28
		mm	3.150	2.500	2.000	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315
Single Layer	Turns	14	18	22	29	36	46	58	73	91	114	142	
	Rdc(Ω)	1.4 m	2.8 m	5.4 m	11.4 m	22.4 m	45.6 m	91.5 m	183.1 m	363.0 m	723.2 m	1.4	
Full Winding	Turns	15	24	37	57	88	136	211	326	504	780	1,208	
	Rdc(Ω)	1.5 m	3.7 m	9.1 m	22.3 m	54.9 m	134.9 m	332.8 m	817.6 m	2.0	4.9	12.2	

