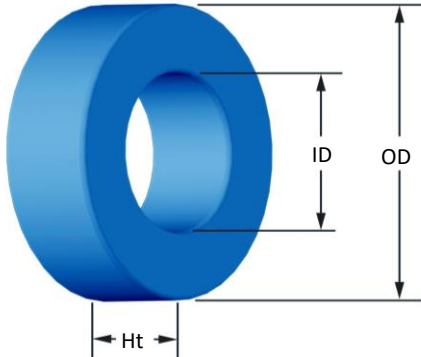




Part Number: MS-185040-2

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



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

OD	(nom. - bare core) (max.)	46.74 mm 47.63 mm	1.840 in 1.875 in
ID	(nom. - bare core) (min.)	28.70 mm 27.89 mm	1.130 in 1.098 in
HT	(nom. - bare core) (max.)	15.24 mm 16.13 mm	0.600 in 0.635 in
Mass	(approximate)	85 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.34 cm ²	
	L _e - Eff. Mag. Path Length	11.62 cm	
	V _e - Eff. Core Volume	15.6 cm ³	
	WA - Min. Eff. Window Area	6.11 cm ²	
	sa - Surface Area	79.6 cm ²	
Inductance	μ _i (reference)	40	
	A _L value (nominal)	57 nH/N ²	
Core Loss	Test Winding	N=80, #20 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.48 V	
	AL tolerance	±8%	
	Core Loss(mW/cm ³):	$\frac{f}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$	
DC Saturation	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	
	frequency	50 kHz	
	Core Loss (nominal)	441 mW/cm ³	
	Core Loss (maximum)	507 mW/cm ³	
DC Saturation	%μ _i $\frac{1}{a + b \cdot H^c} + d$	where H expressed in oersteds, and: a=1.000E-02, b=2.655E-06, c=1.703, d=0.000	
	H _{dc}	100 Oe	
	Percent Initial Perm(nom.)	59.6%	
Coating/Pkg	Percent Initial Perm(min.)	52.0%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
Package Quantity	125 Pcs/Box		

Winding Table	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	21	27	34	43	54	68	85	106	133	166	207
		Rdc(Ω)	2.8 m	5.8 m	11.7 m	23.5 m	46.8 m	93.8 m	186.5 m	369.9 m	738.1 m	1.5	2.9
Full Winding	Turns	32	49	77	119	184	284	440	680	1,053	1,630	2,523	
	Rdc(Ω)	4.3 m	10.6 m	26.4 m	64.9 m	159.6 m	391.8 m	965.4 m	2.4	5.8	14.4	35.4	

