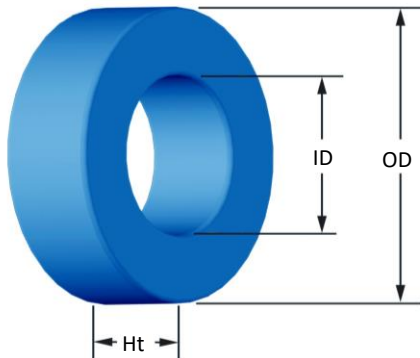




Part Number:

MP-225125-2

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



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

OD	(nom. - bare core) (max.)	57.15 mm 58.04 mm	2.250 in 2.285 in
ID	(nom. - bare core) (min.)	35.56 mm 34.75 mm	1.400 in 1.368 in
HT	(nom. - bare core) (max.)	13.97 mm 14.86 mm	0.550 in 0.585 in
Mass	(approximate)	160 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.44 cm ²	
	L _e - Eff. Mag. Path Length	14.296 cm	
	V _e - Eff. Core Volume	20.7 cm ³	
	WA - Min. Eff. Window Area	9.48 cm ²	
	sa - Surface Area	109 cm ²	
Inductance	mlt - mean length per turn	7.04 cm	
	μ _i (reference)	125	
	A _L value (nominal)	156 nH/N ²	
	Test Winding	N=80, #18 AWG	
	Frequency	10 kHz	
Core Loss	Voltage on Agilent 4284A	0.51 V	
	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=2.193E+10, b=1.308E+09, c=9.301E+06, d=3.087E-14		
	B _{pk}	1000 G	
DC Saturation	frequency	50 kHz	
	Core Loss (nominal)	249 mW/cm ³	
	Core Loss (maximum)	286 mW/cm ³	
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: a=1.000E-02, b=7.875E-06, c=1.874, d=0.000		
Coating/Pkg	H _{DC}	40 Oe	
	Percent Initial Perm(nom.)	55.8%	
	Percent Initial Perm(min.)	47.3%	
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	80 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	27 34 43 54 68 85 106 133 166 207 259
Full Winding	Rdc(Ω)	3.9 m 7.8 m 15.7 m 31.4 m 63.0 m 125.2 m 248.2 m 495.3 m 983.2 m 1.9 3.9	
	Turns	50 77 119 184 285 441 682 1,056 1,635 2,530 3,916	
	Rdc(Ω)	7.2 m 17.7 m 43.6 m 107.1 m 263.9 m 649.4 m 1.6 3.9 9.7 23.8 58.7	

