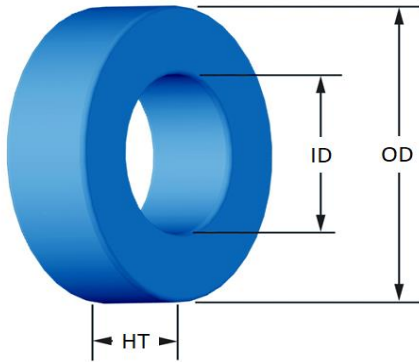




Part Number: **SM-225060-2**

Revision: 2023-Dec-06



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

	mm	in	
OD	(nom. - bare core) 57.15 (max.) 58.04	2.250 2.285	
ID	(nom. - bare core) 35.56 (min.) 34.75	1.400 1.368	
HT	(nom. - bare core) 13.97 (max.) 14.86	0.550 0.585	
Mass	(approximate)	140 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
	W_A - Min. Eff. Window Area	9.48	cm ²
	s_a - Surface Area	109	cm ²
	m_{lt} - mean length per turn	7.04	cm
Inductance	μ_i (reference)	60	
	A_L value (nominal)	75	nH/N ²
	Test Winding	80 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.51	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: $a=1.000E+06$, $b=9.109E+08$, $c=1.221E+07$, $d=1.096E-14$		
	B_{pk}	1000	G
	frequency	50 k	Hz
	Core Loss (nominal)	226	mW/cm ³
Core Loss (maximum)	260	mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=9.058E-07$, $c=1.903$, $d=0.000$		
	H_{DC}	100	Oe
	Percent Initial Perm(nom.)	63.3	%
Percent Initial Perm(min.)	54.9	%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	60 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	27	34	43	54	68	85	106	133	166	207	259	
	Rdc(Ω)	3.9 m	7.8 m	15.7 m	31.4 m	63.0 m	125.2 m	248.2 m	493.3 m	983.2 m	1.9	3.9	
Full Winding	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	

