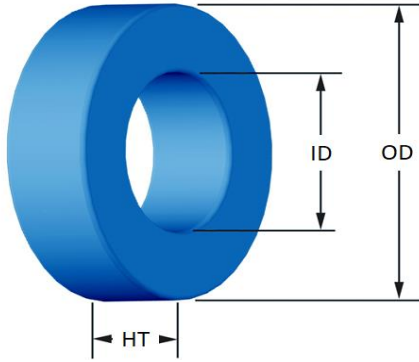




Part Number: **SM-250026-2**

Revision: 2023-Jul-20



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

	mm	in	
OD	(nom. - bare core) 63.50 (max.) 64.77	2.500 2.550	
ID	(nom. - bare core) 31.37 (min.) 30.48	1.235 1.200	
HT	(nom. - bare core) 25.00 (max.) 25.90	0.984 1.020	
Mass	(approximate) 330	grams	
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	3.89	cm ²
	L_e - Eff. Mag. Path Length	14.314	cm
	V_e - Eff. Core Volume	55.8	cm ³
	W_A - Min. Eff. Window Area	7.30	cm ²
	s_a - Surface Area	150	cm ²
	m_{lt} - mean length per turn	10.1	cm
Inductance	μ_i (reference)	26	
	A_L value (nominal)	89	nH/N ²
	Test Winding	100 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	1.7	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: $a=1.000E+06$, $b=3.609E+08$, $c=6.007E+06$, $d=1.919E-14$		
	B_{pk}	500	G
	frequency	100 k	Hz
	Core Loss (nominal)	278	mW/cm ³
Core Loss (maximum)	319	mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$, $b=6.874E-08$, $c=2.019$, $d=0.000$		
	H_{DC}	200	Oe
	Percent Initial Perm(nom.)	76.7	%
Percent Initial Perm(min.)	69.4	%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	27 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	23	29	37	47	59	74	93	116	145	182	227	
	Rdc(Ω)	4.8 m	9.6 m	19.5 m	39.4 m	78.6 m	156.9 m	313.5 m	622.0 m	1.2	2.5	4.9	
Full Winding	Turns	38	59	91	142	219	339	525	813	1,258	1,947	3,013	
	Rdc(Ω)	7.9 m	19.6 m	48.0 m	119.0 m	291.9 m	718.6 m	1.8	4.4	10.7	26.4	65.0	

