

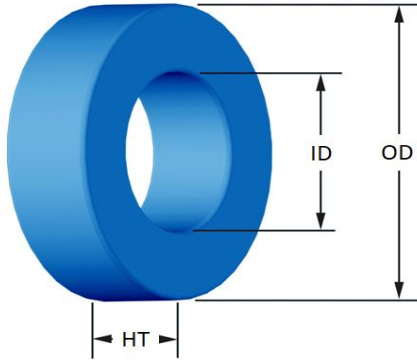


Part Number:

SM-018060-8

Revision:

2024-Dec-19



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

		mm	in
OD	(nom. - bare core)	4.65	0.183
	(max.)	5.21	0.205
ID	(nom. - bare core)	2.36	0.093
	(min.)	1.93	0.076
HT	(nom. - bare core)	2.54	0.100
	(max.)	3.30	0.130
Mass	(approximate)	0.20	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0285	cm ²
	L_e - Eff. Mag. Path Length	1.06	cm
	V_e - Eff. Core Volume	0.0302	cm ³
	W_A - Min. Eff. Window Area	0.0293	cm ²
	s_a - Surface Area	1.15	cm ²
	mlt - mean length per turn	1.08	cm
Inductance	μ_i (reference)	60	
	A_L value (nominal)	20	nH/N ²
	Test Winding	30 Turns	AWG# 32
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.004	V
	AL tolerance	±15%	
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
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
Coating/Pkg	Coating Type:	Parylene N	
	Voltage Breakdown (min.)	500 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	27,000 Pcs/Box	

Winding Table	Wire Size	AWG	28	30	32	34	36	38	40	42	44	-	-
		mm	0.315	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-	-
	Single Layer	Turns	12	15	20	25	32	40	51	64	81	-	-
		Rdc(Ω)	27.7 m	55.1 m	116.8 m	232.1 m	472.6 m	939.5 m	1.9	3.8	7.7	-	-
Full Winding	Turns	12	19	29	45	69	107	166	257	398	-	-	-
	Rdc(Ω)	27.7 m	69.8 m	169.3 m	417.9 m	1.0	2.5	6.2	15.3	37.6	-	-	-

Special Spec:

Preliminary.

