

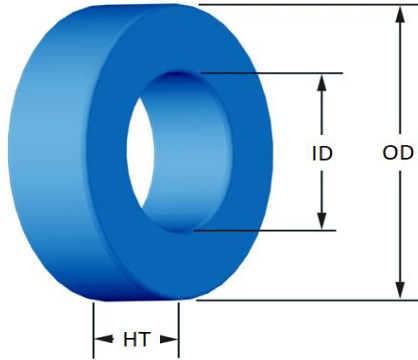


Part Number:

SM-014060-8

Revision:

2024-Dec-19



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

		mm	in
OD	(nom. - bare core)	3.56	0.140
	(max.)	3.76	0.148
ID	(nom. - bare core)	1.78	0.070
	(min.)	1.52	0.060
HT	(nom. - bare core)	1.52	0.060
	(max.)	1.73	0.068
Mass	(approximate)	0.07	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.0137	cm ²
	L_e - Eff. Mag. Path Length	0.817	cm
	V_e - Eff. Core Volume	0.0107	cm ³
	W_A - Min. Eff. Window Area	0.0181	cm ²
	s_a - Surface Area	0.523	cm ²
	m_{lt} - mean length per turn	0.646	cm
Inductance	μ_i (reference)	60	
	A_L value (nominal)	13	nH/N ²
	Test Winding	30 Turns	AWG# 36
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.002	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	36,000 Pcs/Box	

Winding Table	Wire Size	AWG	30	32	34	36	38	40	42	44	-	-	-
		mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	-	-	-
	Single Layer	Turns	11	15	19	25	31	40	50	63	-	-	-
		Rdc(Ω)	24.1 m	52.2 m	105.1 m	219.9 m	433.7 m	890.0 m	1.8	3.5	-	-	-
Full Winding	Turns	12	18	28	43	67	103	159	247	-	-	-	-
	Rdc(Ω)	26.2 m	62.6 m	154.9 m	378.3 m	937.3 m	2.3	5.6	13.9	-	-	-	-

Special Spec:

Preliminary.

