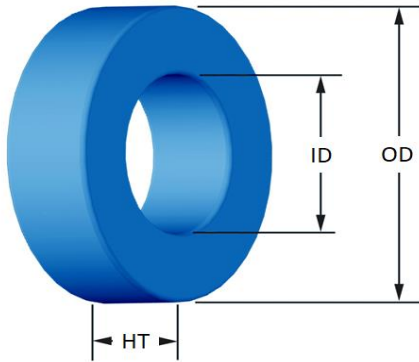




Part Number: SM-141060-2

Revision: 2023-Dec-06



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

	mm	in
OD	(nom. - bare core) 35.81 (max.) 36.63	1.410 1.442
ID	(nom. - bare core) 22.35 (min.) 21.54	0.880 0.848
HT	(nom. - bare core) 10.46 (max.) 11.28	0.412 0.444

Mass	(approximate)	40	grams
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	0.678	cm ²
	L_e - Eff. Mag. Path Length	8.98	cm
	V_e - Eff. Core Volume	6.09	cm ³
	W_A - Min. Eff. Window Area	3.64	cm ²
	s_a - Surface Area	45.6	cm ²
	m_{lt} - mean length per turn	4.84	cm
Inductance	μ_i (reference)	60	
	A_L value (nominal)	56	nH/N ²
	Test Winding	80 Turns	AWG# 22
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.24	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	315 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	15	20	25	32	41	52	65	81	102	128	159
		Rdc(Ω)	1.5 m	3.2 m	6.3 m	12.8 m	26.1 m	52.7 m	104.7 m	207.5 m	415.6 m	829.5 m	1.6
Full Winding	Turns	19	30	46	71	109	169	262	406	628	972	1,505	
	Rdc(Ω)	1.9 m	4.8 m	11.6 m	28.4 m	69.4 m	171.2 m	422.1 m	1.0	2.6	6.3	15.5	

