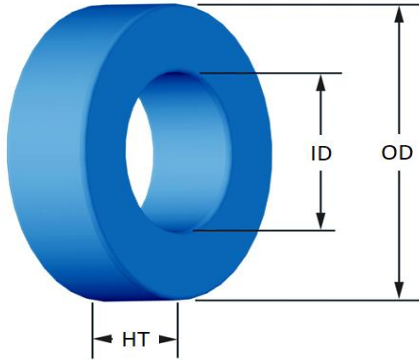




Part Number: **OD-185060-2**

Revision: 2023-Dec-06



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

	mm	in											
OD	(nom. - bare core) 46.74 (max.) 47.63	1.840 1.875											
ID	(nom. - bare core) 28.70 (min.) 27.89	1.130 1.098											
HT	(nom. - bare core) 15.24 (max.) 16.13	0.600 0.635											
Mass	(approximate)	110 grams											
Magnetic Dimensions	A_e - Eff. Mag. Cross Section	1.34	cm ²										
	L_e - Eff. Mag. Path Length	11.62	cm										
	V_e - Eff. Core Volume	15.6	cm ³										
	W_A - Min. Eff. Window Area	6.11	cm ²										
	s_a - Surface Area	79.6	cm ²										
	m_{lt} - mean length per turn	6.59	cm										
Inductance	μ_i (reference)	60											
	A_L value (nominal)	86	nH/N ²										
	Test Winding	80 Turns	AWG# 20										
	Frequency	10k	Hz										
	Voltage on Agilent 4284A	0.48	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: $a=1.000E+06$, $b=8.154E+08$, $c=2.976E+06$, $d=3.292E-14$												
	B_{pk}	1000	G										
	frequency	50 k	Hz										
	Core Loss (nominal)	450	mW/cm ³										
Core Loss (maximum)	517	mW/cm ³											
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: $a=1.000E-02$, $b=2.111E-08$, $c=2.501$, $d=0.000$												
	H_{DC}	100	Oe										
	Percent Initial Perm.(nom.)	82.5	%										
Percent Initial Perm.(min.)	74.9	%											
Coating/Pkg	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
	Limit	0.1 mA, 5 s											
	Package Quantity	100 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	21	27	34	43	54	68	85	106	133	166	207
		Rdc(Ω)	2.8 m	5.8 m	11.7 m	23.5 m	46.8 m	93.8 m	186.5 m	369.9 m	738.1 m	1.5	2.9
	Full Winding	Turns	32	49	77	119	184	284	440	680	1,053	1,630	2,523
Rdc(Ω)		4.3 m	10.6 m	26.4 m	64.9 m	159.6 m	391.8 m	965.4 m	2.4	5.8	14.4	35.4	

