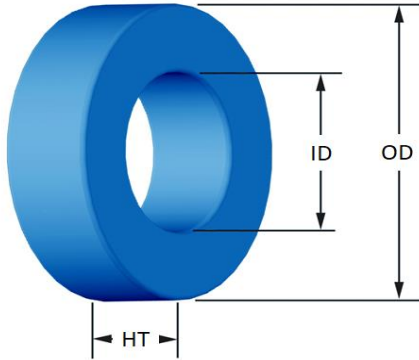




**Part Number: HF-400026-2**

Revision: 2023-Dec-06



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

	mm	in
<b>OD</b>	(nom. - bare core) 101.60 (max.) 102.87	4.000 4.050
<b>ID</b>	(nom. - bare core) 57.15 (min.) 55.75	2.250 2.195
<b>HT</b>	(nom. - bare core) 16.51 (max.) 17.78	0.650 0.700

Mass	(approximate)	540	grams
<b>Magnetic Dimensions</b>	$A_e$ - Eff. Mag. Cross Section	3.52	cm <sup>2</sup>
	$L_e$ - Eff. Mag. Path Length	24.271	cm
	$V_e$ - Eff. Core Volume	85.5	cm <sup>3</sup>
	$W_A$ - Min. Eff. Window Area	24.4	cm <sup>2</sup>
	$s_a$ - Surface Area	303	cm <sup>2</sup>
	$m_{lt}$ - mean length per turn	11.1	cm
<b>Inductance</b>	$\mu_i$ (reference)	26	
	$A_L$ value (nominal)	47.4	nH/N <sup>2</sup>
	Test Winding	140 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	2.2	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: $a=2.058E+09$ , $b=3.239E+08$ , $c=3.003E+06$ , $d=1.233E-13$		
	$B_{pk}$	300	G
	frequency	100 k	Hz
	Core Loss (nominal)	214	mW/cm <sup>3</sup>
	Core Loss (maximum)	246	mW/cm <sup>3</sup>

DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and: $a=1.000E-02$ , $b=2.437E-06$ , $c=1.438$ , $d=0.000$		
	$H_{DC}$	200	Oe
	Percent Initial Perm(nom.)	66.9	%
	Percent Initial Perm(min.)	60.8	%

Coating/Pkg	Coating Type:	Blue Epoxy
	Voltage Breakdown (min.)	1000 Vrms
	Limit	0.1 mA, 5 s
	Package Quantity	20 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	44	56	70	88	110	138	172	215	268	335	417
		Rdc(Ω)	10.0 m	20.2 m	40.2 m	80.5 m	160.0 m	319.2 m	632.7 m	1.3	2.5	5.0	9.8
Full Winding	Turns	128	198	306	474	733	1,135	1,756	2,719	4,208	6,512	10,079	
	Rdc(Ω)	29.1 m	71.6 m	175.9 m	433.4 m	1.1	2.6	6.5	15.9	39.1	96.4	237.2	

