



Part Number:

MS-400026-2

Revision:

2023-Dec-06



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

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

Mass	(approximate)	440	grams
	A _e - Eff. Mag. Cross Section	3.52	cm ²
	L _e - Eff. Mag. Path Length	24.271	cm
	V _e - Eff. Core Volume	85.5	cm ³
	WA - Min. Eff. Window Area	24.4	cm ²
	sa - Surface Area	303	cm ²

Inductance	μ _i (reference)	26	
	A _L value (nominal)	47.4	nH/N ²
	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=1.000E+06, b=4.969E+08, c=3.993E+06, d=2.867E-14		
	B _{pk}	500	G
	frequency	100 k	Hz
	Core Loss (nominal)	295	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=2.061E-07, c=1.995, d=0.000		
	H _{dc}	200	Oe
	Percent Initial Perm(nom.)	55.4	%
	Percent Initial Perm(min.)	46.3	%

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

