



**Part Number:** **MS-301026-2**

Revision 2021-Dec-01 - Generated 2021-Dec-01



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

<b>OD</b>	(nom. - bare core) (max.)	77.80 mm 78.94 mm	3.063 in 3.108 in										
<b>ID</b>	(nom. - bare core) (min.)	49.23 mm 47.96 mm	1.938 in 1.888 in										
<b>HT</b>	(nom. - bare core) (max.)	15.88 mm 17.15 mm	0.625 in 0.675 in										
<b>Mass</b>	(approximate)	220 grams											
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	2.22 cm <sup>2</sup>											
	L <sub>e</sub> - Eff. Mag. Path Length	19.612 cm											
	V <sub>e</sub> - Eff. Core Volume	43.5 cm <sup>3</sup>											
	WA - Min. Eff. Window Area	18.1 cm <sup>2</sup>											
	sa - Surface Area	193 cm <sup>2</sup>											
<b>Inductance</b>	μ <sub>i</sub> (reference)	26											
	A <sub>L</sub> value (nominal)	37 nH/N <sup>2</sup>											
<b>Core Loss</b>	Test Winding	N=120, #18 AWG											
	Frequency	10 kHz											
	Voltage on Agilent 4284A	1.2 V											
	AL tolerance	±8%											
	Core Loss(mW/cm <sup>3</sup> ):	$\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$											
<b>DC Saturation</b>	where B <sub>pk</sub> 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 <sub>pk</sub>	500 G											
	frequency	100 kHz											
	Core Loss (nominal)	295 mW/cm <sup>3</sup>											
	Core Loss (maximum)	339 mW/cm <sup>3</sup>											
<b>DC Saturation</b>	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$												
	where H expressed in oersteds, and: a=1.000E-02, b=2.061E-07, c=1.995, d=0.000												
	H <sub>DC</sub>	200 Oe											
<b>Coating/Pkg</b>	Percent Initial Perm(nom.)	54.4%											
	Percent Initial Perm(min.)	46.3%											
	Coating Type:	Blue Epoxy											
	Voltage Breakdown (min.)	1000 Vrms											
<b>Winding Table</b>	Limit	0.1 mA, 5 s											
	Package Quantity	36 Pcs/Box											
	<b>Wire Size</b>	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
<b>Single Layer</b>	Turns	38	48	60	75	95	118	148	185	230	287	358	
	Rdc(Ω)	7.0 m	14.0 m	27.9 m	55.4 m	111.5 m	220.3 m	439.5 m	873.8 m	1.7	3.4	6.8	
<b>Full Winding</b>	Turns	95	146	227	351	543	840	1,300	2,012	3,114	4,820	7,459	
	Rdc(Ω)	17.4 m	42.6 m	105.4 m	259.1 m	637.6 m	1.6	3.9	9.5	23.4	57.6	141.7	

