



**Part Number:** **MS-132075-2**

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



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

<b>OD</b>	(nom. - bare core) (max.)	33.02 mm 33.83 mm	1.300 in 1.332 in
<b>ID</b>	(nom. - bare core) (min.)	19.94 mm 19.30 mm	0.785 in 0.760 in
<b>HT</b>	(nom. - bare core) (max.)	11.18 mm 11.99 mm	0.440 in 0.472 in
<b>Mass</b>	(approximate)	33 grams	
<b>Magnetic Dimensions</b>	A <sub>e</sub> - Eff. Mag. Cross Section	0.698 cm <sup>2</sup>	
	L <sub>e</sub> - Eff. Mag. Path Length	8.15 cm	
	V <sub>e</sub> - Eff. Core Volume	5.69 cm <sup>3</sup>	
	WA - Min. Eff. Window Area	2.93 cm <sup>2</sup>	
	sa - Surface Area	40.6 cm <sup>2</sup>	
<b>Inductance</b>	μ <sub>i</sub> (reference)	75	
	A <sub>L</sub> value (nominal)	80.8 nH/N <sup>2</sup>	
	Test Winding	N=70, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.22 V	
AL tolerance	±8%		
<b>Core Loss</b>	Core Loss(mW/cm <sup>3</sup> ): $\frac{a}{Bpk^3} + \frac{b}{Bpk^{2.3}} + \frac{c}{Bpk^{1.65}} + d \cdot Bpk^2 \cdot f^2$		
	where B <sub>pk</sub> expressed in gauss, f expressed in hertz, and: a=7.890E+09, b=7.111E+08, c=8.980E+06, d=2.846E-14		
	B <sub>pk</sub>	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	323 mW/cm <sup>3</sup>	
Core Loss (maximum)	372 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=3.414E-06, c=1.841, d=0.000		
	H <sub>dc</sub>	80 Oe	
<b>Coating/Pkg</b>	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
Package Quantity	448 Pcs/Box		

<b>Winding Table</b>	<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	14	18	22	29	36	46	58	73	91	114	142
		Rdc(Ω)	1.4 m	2.8 m	5.5 m	11.6 m	22.8 m	46.3 m	92.9 m	186.0 m	368.8 m	734.8 m	1.5
<b>Full Winding</b>	Turns	15	24	37	57	88	136	211	326	504	780	1,208	
	Rdc(Ω)	1.5 m	3.8 m	9.3 m	22.7 m	55.7 m	137.0 m	338.1 m	830.8 m	2.0	5.0	12.4	

