



Part Number: MS-131160-2
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OD	(nom. - bare core)	33.02 mm	1.300 in
	(max. - after coating)	33.83 mm	1.332 in
ID	(nom. - bare core)	19.94 mm	0.785 in
	(min. - after coating)	19.30 mm	0.760 in
Ht	(nom. - bare core)	8.76 mm	0.345 in
	(max. - after coating)	9.70 mm	0.382 in
Mass	(approximate)	26 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.551 cm ²	
	L _e - Eff. Mag. Path Length	8.15 cm	
	V _e - Eff. Core Volume	4.49 cm ³	
	WA - Min. Eff. Window Area	2.93 cm ²	
	sa - Surface Area	37.8 cm ²	
	mlt - mean length per turn	4.36 cm	
	Inductance	μ _i (reference)	160
	A _L value (nominal)	136 nH/N ²	
	Test Winding	N=70, #22 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.17 V	
	AL tolerance	±8%	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B _{pk} expressed in gauss, f expressed in hertz, and:		
	a=3.679E+10, b=1.150E+09, c=1.004E+07, d=2.851E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	241 mW/cm ³	
	Core Loss (maximum)	277 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=4.439E-05, c=1.627, d=0.000		
	H _{DC}	40 Oe	
	Percent Initial Perm.(nom.)	35.8%	
	Percent Initial Perm.(min.)	29.3%	
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	576 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	14	18	22	29	36	46	58	73	91	114	142
		Rdc(Ω)	1.3 m	2.6 m	5.0 m	10.5 m	20.6 m	41.9 m	84.1 m	168.3 m	333.7 m	664.9 m	1.3
Full Winding	Turns	15	24	37	57	88	136	211	326	504	780	1,208	
	Rdc(Ω)	1.3 m	3.4 m	8.4 m	20.5 m	50.4 m	124.0 m	305.9 m	751.8 m	1.8	4.5	11.2	

