



Part Number:

MS-226147-2

Revision:

2023-Dec-06



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

		mm	in
OD	(nom. - bare core)	57.15	2.250
	(max.)	58.04	2.285
ID	(nom. - bare core)	26.39	1.039
	(min.)	25.58	1.007
HT	(nom. - bare core)	15.24	0.600
	(max.)	16.13	0.635

Magnetic Dimensions	Mass (approximate)	170	grams
	A_e - Eff. Mag. Cross Section	2.29	cm ²
	L_e - Eff. Mag. Path Length	12.506	cm
	V_e - Eff. Core Volume	28.6	cm ³
	W_A - Min. Eff. Window Area	5.14	cm ²
	s_a - Surface Area	105	cm ²
Inductance	m_l - mean length per turn	7.75	cm
	μ_i (reference)	147	
	A_L value (nominal)	338	nH/N ²
	Test Winding	60 Turns	AWG# 18
	Frequency	10k	Hz
	Voltage on Agilent 4284A	0.61	V
Core Loss	AL tolerance	±8%	
	$\text{Core Loss (mW/cm}^3\text{)} = \frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}} + d \cdot B_{pk}^2 \cdot f^2$		
	where B_{pk} expressed in gauss, f expressed in hertz, and:		
	$a=1.394E+10, b=1.034E+09, c=1.244E+07, d=4.007E-14$		
	B_{pk}	1000	G
	frequency	50 k	Hz
DC Saturation	Core Loss (nominal)	276	mW/cm ³
	Core Loss (maximum)	318	mW/cm ³
	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$		
	where H expressed in oersteds, and:		
	$a=1.000E-02, b=4.732E-05, c=1.539, d=0.000$		
	H_{DC}	40	Oe
Coating/Pkg	Percent Initial Perm(nom.)	42.0	%
	Percent Initial Perm(min.)	35.3	%
	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000	Vrms
Winding Table	Limit	0.1 mA, 5 s	
	Package Quantity	60 Pcs/Box	
	Wire Size	AWG	8
		mm	3.150
Single Layer	Turns	19	24
	Rdc(Q)	3.0 m	6.1 m
	Turns	27	42
	Rdc(Q)	4.3 m	10.6 m
Full Winding	Turns	27	42
	Rdc(Q)	4.3 m	10.6 m
	Turns	27	42
	Rdc(Q)	4.3 m	10.6 m

