



Part Number: MP-044160-2
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OD	(nom. - bare core) (max. - after coating)	11.18 mm 11.89 mm	0.440 in 0.468 in
ID	(nom. - bare core) (min. - after coating)	6.35 mm 5.89 mm	0.250 in 0.232 in
Ht	(nom. - bare core) (max. - after coating)	3.96 mm 4.72 mm	0.156 in 0.186 in
Mass	(approximate)	1.9 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.0906 cm ²	
	L _e - Eff. Mag. Path Length	2.69 cm	
	V _e - Eff. Core Volume	0.244 cm ³	
	WA - Min. Eff. Window Area	0.273 cm ²	
	sa - Surface Area	5.10 cm ²	
	mlt - mean length per turn	1.84 cm	
Inductance	μ _i (reference)	160	
	A _L value (nominal)	68 nH/N ²	
	Test Winding	N=60, #30 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.024 V	
Core Loss	$\text{Core Loss (mW/cm}^3\text{)} = \frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$ <p>where B_{pk} expressed in gauss, f expressed in hertz, and: a=3.167E+10, b=1.206E+09, c=9.656E+06, d=5.636E-14</p>		
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$ <p>where H expressed in oersteds, and: a=1.000E-02, b=1.123E-05, c=1.935, d=0.000</p>		
Coating/Pkg	Coating Type: Blue Epoxy Voltage Breakdown (min.): 1000 Vrms Limit: 0.1 mA, 5 s Package Quantity: 9,000 Pcs/Box		

Winding Table	Wire Size	AWG	18	20	22	24	26	28	30	32	34	36	38
		mm	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160	0.125	0.100
	Single Layer	Turns	12	16	20	26	33	42	52	66	83	103	129
		Rdc(Ω)	4.6 m	9.8 m	19.5 m	40.2 m	81.2 m	164.4 m	323.6 m	653.3 m	1.3	2.6	5.1
Full Winding	Turns	13	20	30	47	73	113	174	270	417	646	999	
	Rdc(Ω)	5.0 m	12.2 m	29.2 m	72.7 m	179.6 m	442.2 m	1.1	2.7	6.6	16.2	39.8	

