



Part Number: **OP-068040-2**
 Revision 20160816 - Generated 2016-Aug-16



OD	(nom. - bare core)	17.27 mm	0.680 in
	(max. - after coating)	18.03 mm	0.710 in
ID	(nom. - bare core)	9.65 mm	0.380 in
	(min. - after coating)	9.02 mm	0.355 in
Ht	(nom. - bare core)	6.35 mm	0.250 in
	(max. - after coating)	7.11 mm	0.280 in
Mass	(approximate)	6.1 grams	
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.232 cm ²	
	L _e - Eff. Mag. Path Length	4.14 cm	
	V _e - Eff. Core Volume	0.961 cm ³	
	WA - Min. Eff. Window Area	0.639 cm ²	
	sa - Surface Area	11.7 cm ²	
	mlt - mean length per turn	2.77 cm	
	μ _i (reference)	40	
Inductance	A _L value (nominal)	29 nH/N ²	
	Test Winding	N=70, #28 AWG	
	Frequency	10 kHz	
	Voltage on Agilent 4284A	0.072 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=3.471E+09, b=6.469E+08, c=5.242E+06, d=7.252E-14		
	B _{pk}	1000 G	
	frequency	50 kHz	
	Core Loss (nominal)	529 mW/cm ³	
Core Loss (maximum)	609 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=2.043E-06, c=1.627, d=0.000		
	H _{DC}	100 Oe	
	Percent Initial Perm (nom.)	73.2%	
Percent Initial Perm (min.)	66.9%		
Coating/Pkg	Coating Type:	Blue Epoxy	
	Voltage Breakdown (min.)	1000 Vrms	
	Limit	0.1 mA, 5 s	
	Package Quantity	2,340 Pcs/Box	

Winding Table	Wire Size	AWG	14	16	18	20	22	24	26	28	30	32	34
		mm	1.600	1.250	1.000	0.800	0.630	0.500	0.400	0.315	0.250	0.200	0.160
	Single Layer	Turns	12	15	20	26	32	41	52	65	82	102	128
		Rdc(Ω)	2.8 m	5.5 m	11.6 m	24.0 m	47.0 m	95.7 m	193.1 m	383.8 m	770.0 m	1.5	3.0
Full Winding	Turns	12	19	30	46	71	110	170	264	408	632	978	
	Rdc(Ω)	2.8 m	6.9 m	17.4 m	42.5 m	104.2 m	256.8 m	631.1 m	1.6	3.8	9.4	23.2	

