



Part Number: **OP-133040-2**
 Revision 20160816 - Generated 2016-Aug-16



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)	14.00 mm	0.551 in	
	(max. - after coating)	15.00 mm	0.591 in	
Mass	(approximate)	45 grams		
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	0.874 cm ²		
	L _e - Eff. Mag. Path Length	8.15 cm		
	V _e - Eff. Core Volume	7.12 cm ³		
	WA - Min. Eff. Window Area	2.93 cm ²		
	sa - Surface Area	44.3 cm ²		
	mlt - mean length per turn	5.42 cm		
	Inductance	μ _i (reference)	40	
Core Loss	A _L value (nominal)	53.3 nH/N ²		
	Test Winding	N=70, #22 AWG		
	Frequency	10 kHz		
	Voltage on Agilent 4284A	0.27 V		
	AL tolerance	±8%		
	Core Loss(mW/cm ³)= $\frac{f}{\frac{a}{B_{pk}^3} + \frac{b}{B_{pk}^{2.3}} + \frac{c}{B_{pk}^{1.65}}} + d \cdot B_{pk}^2 \cdot f^2$			
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				
DC Saturation	B _{pk}	1000 G		
	frequency	50 kHz		
	Core Loss (nominal)	529 mW/cm ³		
	Core Loss (maximum)	609 mW/cm ³		
DC Saturation	%μ _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		
Coating/Pkg	Percent Initial Perm(nom.)	73.2%		
	Percent Initial Perm(min.)	66.9%		
	Coating Type:	Blue Epoxy		
	Voltage Breakdown (min.)	1000 Vrms		
Winding Table	Limit	0.1 mA, 5 s		
	Package Quantity	256 Pcs/Box		
	Wire Size	AWG	8	10
		mm	3.150	2.500
Single Layer	Turns	14	18	
	Rdc(Ω)	1.6 m	3.2 m	
Full Winding	Turns	15	24	
	Rdc(Ω)	1.7 m	4.3 m	

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)	1.6 m	3.2 m	6.2 m	13.0 m	25.7 m	52.1 m	104.6 m	209.3 m	414.9 m	826.6 m	1.6
Full Winding	Turns	15	24	37	57	88	136	211	326	504	780	1,208
	Rdc(Ω)	1.7 m	4.3 m	10.4 m	25.5 m	62.7 m	154.2 m	380.4 m	934.6 m	2.3	5.7	13.9

