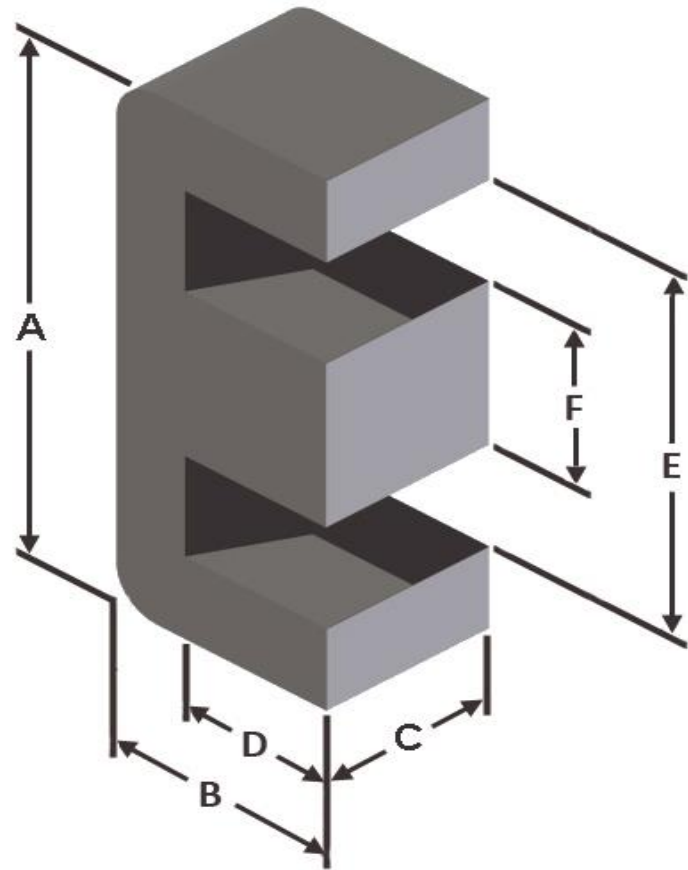




Part Number: **E168-70**
Revision 20160713 - Generated 2016-Aug-15



A	42.80 ± 0.38 mm	1.685 ± 0.015 in
B	21.08 ± 0.20 mm	0.830 ± 0.008 in
C	14.99 ± 0.25 mm	0.590 ± 0.010 in
D	15.75 mm (nom.)	0.620 in (nom.)
E	30.73 mm (nom.)	1.210 in (nom.)
F	12.07 ± 0.18 mm	0.475 ± 0.007 in
Mass	(approximate)	68 grams/half
Magnetic Dimensions	A _e - Eff. Mag. Cross Section	1.81 cm ²
	L _e - Eff. Mag. Path Length	10.4 cm
	V _e - Eff. Core Volume	18.5 cm ³
	WA - Min. Eff. Window Area	2.91 cm ²
	sa - Surface Area	73.2 cm ²
	mlt - mean length per turn	9.14 cm
	Inductance	μ _i (reference)
A _L value (nominal)		225 nH/N ²
Test Winding		N=100, #18 AWG
Frequency		10 kHz
Voltage on Agilent 4284A		0.80 V
A _L tolerance		±10%
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=1.00E+10, b=1.30E+09, c=7.90E+06, d=4.20E-14	
	B _{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	13 mW/cm ³
Core Loss (maximum)	15 mW/cm ³	
DC Saturation	$\% \mu_i = \frac{1}{a + b \cdot H^c} + d$	
	where H expressed in oersteds, and: a=1.00E-02, b=1.85E-05, c=1.64, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm(nom.)	46.8%
Percent Initial Perm(min.)	39.4%	
Coating/Pkg	Coating Type:	None, Beige/Black Stripes
	Voltage Breakdown (min.)	N/A
	Limit	N/A
	Package Quantity	200 Halves/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
	Full Winding	Turns	16	24	38	58	90	139	216	334	517	800	1,239
	Rdc(Ω)	3.0 m	7.2 m	18.1 m	43.9 m	108.3 m	265.9 m	657.1 m	1.6	4.0	9.8	24.1	

