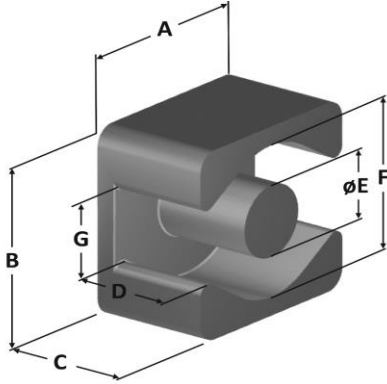




Part Number: **HC054A12A-66000**

Revision 20200506 - Generated 2020-May-06



A	5.40 ± 0.15 mm	0.213 ± 0.006 in
B	5.10 ± 0.15 mm	0.201 ± 0.006 in
C	1.23 ± 0.10 mm	0.048 ± 0.004 in
D	0.58 mm (min.)	0.023 in (min.)
E	1.50 ± 0.10 mm	0.059 ± 0.004 in
F	4.10 mm (min.)	0.161 in (min.)
G	2.20 mm (nom.)	0.087 in (nom.)
Mass	(approximate)	0.15 grams/half

Magnetic Dimensions	when matched with IC (thickness=0.55 mm. nom.)	
	A _e - Eff. Mag. Cross Section	0.0468 cm ²
	L _e - Eff. Mag. Path Length	0.718 cm
	V _e - Eff. Core Volume	0.0385 cm ³
	WA - Min. Eff. Window Area	0.00851 cm ²
	sa - Surface Area	0.924 cm ²
	mlt - mean length per turn	0.903 cm

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=1.72E+10, b=4.96E+07, c=1.23E+06, d=1.73E-14	
	B _{pk}	140 G
	frequency	100 kHz
	Core Loss (nominal)	17 mW/cm ³
	Core Loss (maximum)	20 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=1.23E-05, c=1.48, d=0.00	
	H _{DC}	50 Oe
	Percent Initial Perm.(nom.)	71.0%
	Percent Initial Perm.(min.)	65.1%

Coating/Pkg	Coating Type:	Per UL Card File #E140098(S), Black, Outer Surface only
	Voltage Breakdown (min.)	200Vrms, 60Hz
	Limit	3 mA, 5 s
	Package Quantity	25,000 Halves/Box

Winding Table	Wire Size	AWG	32	34	36	38	40	42	44	#N/A	#N/A	#N/A	#N/A
		mm	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A	#N/A
	Full Winding	Turns	9	13	21	32	50	77	119	#N/A	#N/A	#N/A	#N/A
		Rdc(Ω)	43.8 m	100.5 m	258.3 m	626.0 m	1.6	3.8	9.4	#N/A	#N/A	#N/A	#N/A

