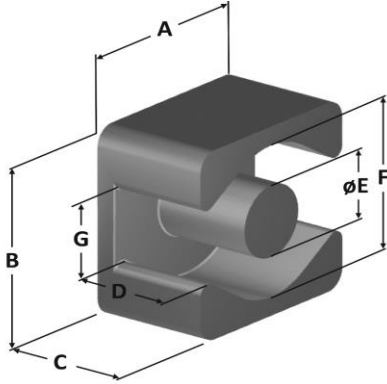




Part Number: **HC045A19A-66120**

Revision 20200506 - Generated 2020-May-06



A	4.50 ± 0.15 mm	0.177 ± 0.006 in
B	4.50 ± 0.15 mm	0.177 ± 0.006 in
C	1.90 ± 0.10 mm	0.075 ± 0.004 in
D	1.15 mm (min.)	0.045 in (min.)
E	1.68 ± 0.10 mm	0.066 ± 0.004 in
F	3.50 mm (min.)	0.138 in (min.)
G	1.68 mm (nom.)	0.066 in (nom.)
Mass	(approximate)	0.16 grams/half

Magnetic Dimensions	when matched with IC (thickness=0.65 mm. nom.)	
	A _e - Eff. Mag. Cross Section	0.0473 cm ²
	L _e - Eff. Mag. Path Length	0.771 cm
	V _e - Eff. Core Volume	0.0393 cm ³
	WA - Min. Eff. Window Area	0.0108 cm ²
	sa - Surface Area	0.864 cm ²
	mlt - mean length per turn	0.837 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	30,000 Halves/Box

Winding Table	Wire Size	AWG	30	32	34	36	38	40	42	44	#N/A	#N/A	#N/A
		mm	0.250	0.200	0.160	0.125	0.100	0.080	0.063	0.050	#N/A	#N/A	#N/A
	Full Winding	Turns	7	11	17	26	41	63	97	151	#N/A	#N/A	#N/A
	Rdc(Ω)	19.8 m	49.6 m	121.8 m	296.4 m	743.2 m	1.8	4.4	11.0	#N/A	#N/A	#N/A	

