

Surface mount fuses offering the highest current ratings in compact sizes



Eaton Bussmann® series 1025HC and 1245HC surface mount fuses offer high current ratings in compact footprints for primary or secondary protection in consumer, computing, energy, and industrial applications.

Product description

Eaton Bussmann® series 1025HC and 1245HC surface mount fuses offer high current ratings in compact footprints for primary or secondary protection in consumer, computing, energy, and industrial applications. These fast-acting fuses provide the highest nominal current ratings in traditional SMD fuse sizes allowing for greater space savings. Eaton's 1025HC fuses are offered in current ratings from 20 A up to 50 A, while the 1245HC fuses are rated up to 100 A.

Eaton Bussmann® series 1025HC and 1245HC fuses have a common footprint from 40 to 100 A current ratings in the same package, allowing for one common pad layout for multiple designs requiring different load demand. Their low resistance (DCR) ensures the highest efficiency with lower associated heat rise. Each product is RoHS compliant and UL recognized for superior reliability and safety.

Features and benefits

- Highest current ratings in common SMD package sizes
- Fast-acting performance
- High power density
- Low DCR for higher efficiency and lower power loss
- RoHS compliant, lead and halogen-free construction
- Operating temperatures from -55 °C to +125 °C for protection in broad temperature environments

Electrical characteristics

Amp Rating	100% In minimum	200% In maximum	300% In maximum
20 A - 30 A	4 hours	60 seconds	-
40 A - 50 A	4 hours	60 seconds	-
60 A ~ 100 A	4 hours	-	3.5 seconds

Product specifications

Part number	Current rating (A)	Voltage rating (V _{AC})	Voltage rating (V _{DC})	Interrupting rating @ rated voltage		Typical resistance (mΩ)
				(A _{AC}) ¹	(A _{DC}) ²	
1025HC20-R	20	250	72	100	500	3.1
1025HC25-R	25	250	72	100	500	2.6
1025HC30-R	30	250	72	100	500	1.7
1025HC40-R	40	250	72	300	500	1.3
1025HC50-R	50	250	60	300	600	1.1
1245HC60A	60	125	80 ⁴ 72 63 32	500	1000	0.58
1245HC80A	80	125	72 63 32	500	1000	0.44
1245HC100A	100	125	72 63 32	500	1000	0.29

1. AC Interrupting Rating (Measured at designated voltage, 100% power factor random closing)

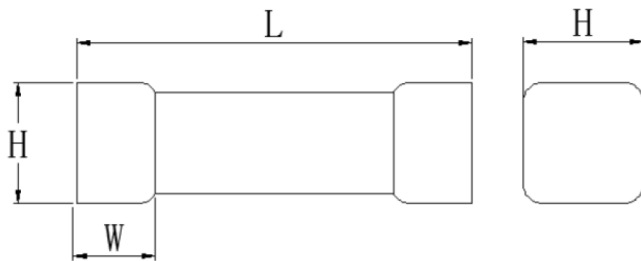
2. DC Interrupting Rating (Measured at designated voltage, time constant of less than 50 microseconds, battery source)

3. Typical Pre-arcing I₂t are measured at 10In Current, DC battery bank, but not exceeding the interrupting rating, time constant of calibrated circuit less than 50 microseconds)

4. Internal qualification for 60 A @ 80 Vdc, UL Approval is pending

Dimensions- mm/(inches)

Drawing not to scale



Rating	L	W	H
20 A - 30 A	10.0 ± 0.50	1.70 ± 0.15	3.15 ± 0.15
40 A - 50 A	12.4 ± 0.50	2.70 ± 0.15	4.50 ± 0.15
60 A - 100 A	12.30 ± 0.40	2.70 ± 0.20	4.50 ± 0.20

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