

Automotive-grade fast-acting fuses for overcurrent protection in vehicles



The CC06FA provides overcurrent protection in Battery management systems.

Product description

Eaton's CC06FA Bussmann® series fast-acting surface mount fuses provide overcurrent protection in Battery Management Systems (BMS) of electric and hybrid vehicles. They are AEC-0200 Grade 1 qualified for superior mechanical and electrical performance in automobiles.

The CC06FA fuses, offered in a small-footprint, lightweight package, provide unparalleled protection at the BMS cell level. With a high breaking capacity (up to 63 Vdc), these fastacting fuses allow for localized shutdown to portions of the BMS without tripping the main fuse protecting the battery.

Features and benefits:

- AEC-Q200 Grade 1 compliant
- Compact-footprint 0603 (1608 metric) package
- Robust cycling performance
- Excellent temperature withstand capability (-55 °C to +125 °C)
- Halogen and lead-free, RoHS compliant, and UL approved
- Solder-free element design; no M-spot



Electrical characteristics

Amp Rating	% of Amp Rating	Opening Time
500 mA – 1.5 A	100%	4 hours minimum
500 mA – 1.5 A	200%	60 seconds maximum

Product specifications

Part Number⁵	Current rating (A)	Voltage rating (V _{dc})	Interrupting rating ¹ (A)	Typical DC cold resistance² (Ω)	Typical pre-arcing³ I²t (A²s)	Typical voltage drop (V)	Part marking
CC06FA500mA	0.5	63	50	1.025	0.0019	0.60	F
CC06FA750mA	0.75	63	50	0.510	0.003	0.44	G
CC06FA1A	1	63	50	0.150	0.007	0.211	Н
CC06FA1.25A	1.25	63	50	0.132	0.008	0.151	J
CC06FA1.5A	1.5	63	50	0.086	0.0319	0.138	К

1. DC interrupting rating measured at rated voltage, time constant less than 50 microseconds, battery source

2. DC cold resistance measured at <10% of rated current

3. Typical pre-arcing I²t measured with a battery bank at rated dc voltage, 10x-rated current, not to exceed IR, time constant of calibrated circuit less than 50 microsecond

Typical voltage drop measured at rated current after temperature stabilizes 4.

Part Number Definition: CC06FAxxx-R 5.

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Powering Business Worldwide

CC06FA = Product code and size

xxx - Ampere rating

-R suffix = RoHS complaint



Eaton

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