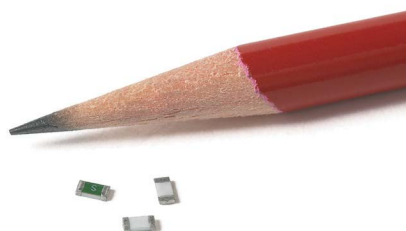


# CC12H

## High I<sup>2</sup>t Chip fuses



### Product features

- High I<sup>2</sup>t
- High inrush withstand capability
- AEC-Q200 qualified: (750 mA to 30 A)
- Excellent temperature and cycling characteristics
- 1206 (3216 metric) compact design utilizes less board space
- Compatible with solder reflow and wave solder

### Applications

Secondary circuit protection

- Laptop, notebook, netbook
- Tablets, e-readers
- Flat panel displays
- High definition television (HDTV)
- LCD/LED backlighting
- Computers and peripherals
- Gaming console systems
- Handheld/portable equipment
- Mobile device chargers

Automotive

- Central body control module
- Heating ventilation and air conditioning controllers (HVAC)
- Doors, window lift and seat control
- Digital instrument cluster
- In-vehicle infotainment (IVI) and navigation
- Electric pumps, motor control and auxiliaries
- Powertrain control module (PCU)/Engine Control unit (ECU)
- Transmission Control Unit (TCU)

### Agency information

- cULus Recognition: File E19180, Guide JDYX2/JDYX8
- AEC-Q200 qualified (750 mA to 30 A)

### Ordering

- Use ordering number (see page 6 for details)

### Packaging suffixes

- -TR (3000 parts per 7" diameter reel, tape width 8 mm)

## Electrical characteristics

| Amp Rating      | % of Amp Rating | Opening Time     |
|-----------------|-----------------|------------------|
| 250 mA – 30 A   | 100%            | 4 hours minimum  |
| 1 A – 3 A       | 200%            | 1.0 s – 60 s     |
| 25 A – 30 A     | 200%            | 120 s max        |
| 1 A – 5 A       | 250%            | 5.0 s max        |
| 1 A – 5 A       | 300%            | 0.1 s – 3.0 s    |
| 250 mA – 750 mA | 350%            | 5 s max          |
| 6 A – 20 A      | 350%            | 5 s max          |
| 250 mA – 500 mA | 1000%           | 0.01 ms – 1.0 ms |
| 750 mA – 30 A   | 1000%           | 0.2 ms – 20 ms   |

## Product specifications

| Part Number | Current rating (A) | Voltage rating (V <sub>DC</sub> ) | Interrupting rating <sup>1</sup> (A) | Typical DC cold resistance <sup>2</sup> (mΩ) | Typical pre-arcing <sup>3</sup> I <sup>2</sup> t (A <sup>2</sup> s) | Typical voltage drop (mV) | Part marking |
|-------------|--------------------|-----------------------------------|--------------------------------------|----------------------------------------------|---------------------------------------------------------------------|---------------------------|--------------|
| CC12H250mA  | 0.25               | 63                                | 50                                   | 3500                                         | 0.00038                                                             | 1400                      | .25          |
| CC12H375mA  | 0.375              | 63                                | 50                                   | 1750                                         | 0.00077                                                             | 730                       | A            |
| CC12H500mA  | 0.5                | 63                                | 50                                   | 980                                          | 0.0019                                                              | 700                       | .5           |
| CC12H750mA  | 0.75               | 63                                | 50                                   | 800                                          | 0.15                                                                | 700                       | E            |
| CC12H1A     | 1                  | 63                                | 50                                   | 470                                          | 0.18                                                                | 490                       | H            |
| CC12H1.5A   | 1.5                | 63                                | 50                                   | 218                                          | 0.4                                                                 | 355                       | K            |
| CC12H2A     | 2                  | 63                                | 50                                   | 133                                          | 1.1                                                                 | 305                       | N            |
| CC12H2.5A   | 2.5                | 63                                | 50                                   | 79                                           | 1.7                                                                 | 240                       | O            |
| CC12H3A     | 3                  | 63                                | 50                                   | 49                                           | 2.2                                                                 | 185                       | P            |
| CC12H3.5A   | 3.5                | 63                                | 50                                   | 37                                           | 2.7                                                                 | 180                       | R            |
| CC12H4A     | 4                  | 63                                | 50                                   | 33                                           | 3.2                                                                 | 169                       | S            |
| CC12H4.5A   | 4.5                | 32                                | 100                                  | 28                                           | 4.2                                                                 | 160                       | X            |
| CC12H5A     | 5                  | 32                                | 100                                  | 23                                           | 6                                                                   | 140                       | T            |
| CC12H6A     | 6                  | 32                                | 100                                  | 15.5                                         | 12                                                                  | 150                       | F            |
| CC12H7A     | 7                  | 32                                | 100                                  | 11.5                                         | 18                                                                  | 130                       | J            |
| CC12H8A     | 8                  | 32                                | 100                                  | 7.3                                          | 18                                                                  | 110                       | V            |
| CC12H10A    | 10                 | 32                                | 100                                  | 6.5                                          | 30                                                                  | 90                        | U            |
| CC12H12A    | 12                 | 32                                | 100                                  | 4.7                                          | 45                                                                  | 90                        | W            |
| CC12H15A    | 15                 | 32                                | 100                                  | 3                                            | 33                                                                  | 90                        | Y            |
| CC12H20A    | 20                 | 32                                | 100                                  | 2                                            | 80                                                                  | 90                        | Q            |
| CC12H25A    | 25                 | 32                                | 200                                  | 3                                            | 60                                                                  | 90                        | L            |
| CC12H30A    | 30                 | 32                                | 200                                  | 2.1                                          | 100                                                                 | 90                        | Z            |

1. DC interrupting rating measured at rated voltage, time constant of less than 50 microseconds, battery source.
2. Typical DC cold resistance measured at <10% of rated current.
3. Typical pre-arcing I<sup>2</sup>t value is measured at 10In rated current.