

EUC10

10 x 25 mm EV fuse



Product features

- 10 x 25 mm fuse
- Current rating: 30 A to 40 A
- 500 Vdc rating
- High breaking capacity for high energy applications
- Designed to JASO D622, ISO8820-8, GB/T31465
- Produced in a factory with ISO9001 & IATF16949 certification
- Minimum breaking capacity 300% In at rated DC voltage
- Bolt-down terminal

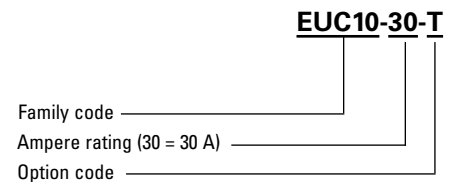
Applications

- Automotive and commercial vehicle on-board chargers
- Uninterruptible power supplies (UPS)
- 3-phase EVSE and charging infrastructure
- Motor protection
- Rectifiers and inverters
- Energy storage systems
- On-board electric vehicle powertrain and distribution

Environmental compliance



Ordering part number



Option code

T= Bolt down terminal

Electrical characteristics

Amps (A)	Minimum (seconds)	Maximum (seconds)
2.0 I _n	1	100
3.0 I _n	0.1	15
5.0 I _n	0.05	1

Product specifications

Part number	Rated voltage	Rated current (A)	Breaking capacity	Typical cold resistance ¹ (mΩ)	Typical voltage drop (mV)	Power loss @ 0.5 I _n (W)
EUC10-30	500 Vdc	30	500 Vdc/20 kA	2.22	110	0.7
EUC10-40	500 Vdc	40	500 Vdc/20 kA	1.62	100	0.9

1. Cold resistance is measured at <10% I_n and +25 °C ambient temperature

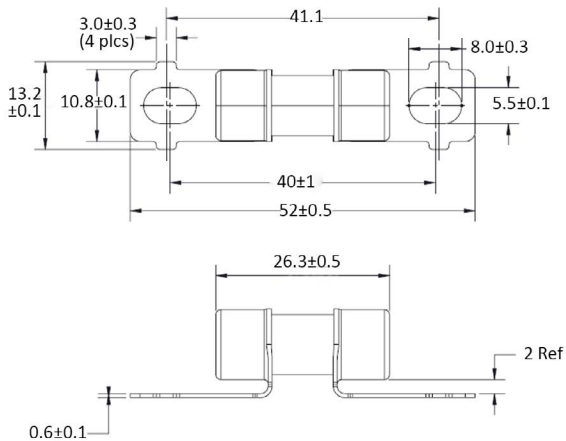
Dimensions- mm

Tolerances unless otherwise specified

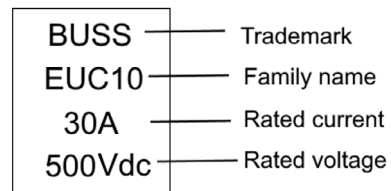
One place x.x = ± 0.3 mm

Two places x.xx = ± 0.13 mm

T: Bolt-down terminal



Part marking



Note: recommended tightening torque is 4.5+/-1.0 Nm for M5 Screw

General specifications

Operating temperature: -40 °C to +125 °C with proper derating factor applied

Strength of terminals: JASO D622 6.3.9, mounting torque 4.5 +/-1 Nm, 3 times

Temperature humidity cycling: JASO D622 6.3.4.1,

- a) maintain the samples at standard conditions for 4 hours
 - b) increase T to 55 +/-2 °C at 95% to 99% RH within 0.5 hours
 - c) maintain T at 55 +/-2 °C at 95% to 99% RH for 10 hours
 - d) decrease T to -40 +/-2 °C within 2.5 hours; the humidity is uncontrolled
 - e) maintain T at -40 +/-2 °C for 2 hours; the humidity is uncontrolled
 - f) increase T to 120 +/-2 °C within 1.5 hours from -40 +/-2 °C; the humidity is uncontrolled
 - g) maintain T at 120 +/-2 °C for 2 hours; the humidity is uncontrolled
 - h) allow to return to RT within 1.5 hours; the humidity is uncontrolled 10 cycles.
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Thermal shock: ISO8820-8 GB/T31465.6, 48 cycles; -40 °C to 100 °C, each cycle 60 minutes

Vibration: JASO D622 6.3.3, 10-55 Hz, 3 directions, 2 hours each direction

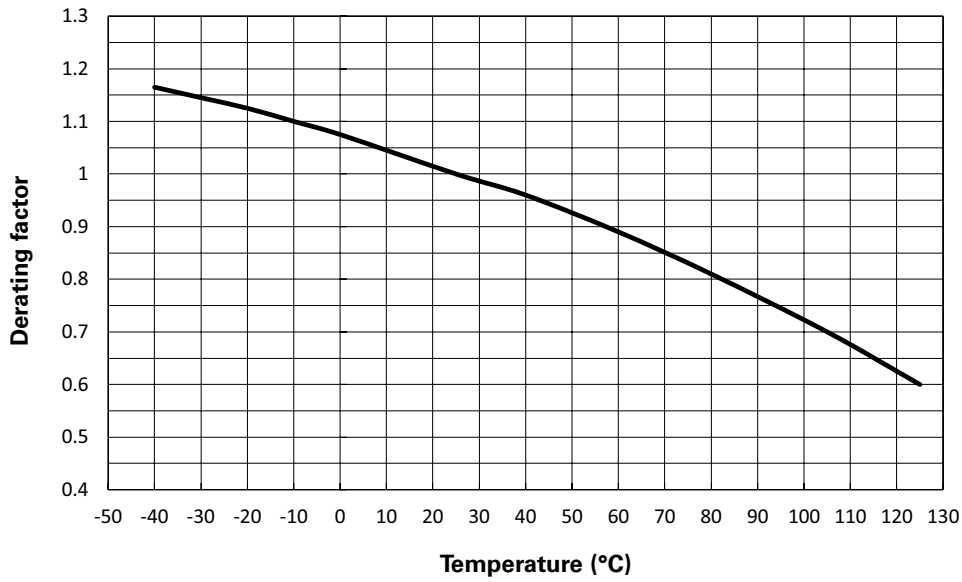
Transient current cycling: JASO D622 6.3.2 (reference), The transient current start from 2.0 In for 0.25 seconds, then drop to 0.5 In and keep this current to 15 seconds to finish one cycle, total 50000 cycles

Lubricant & fuel oil resistance: GB/T31465.1-5.4, Wipe the marking with lubricant or oil 30 seconds

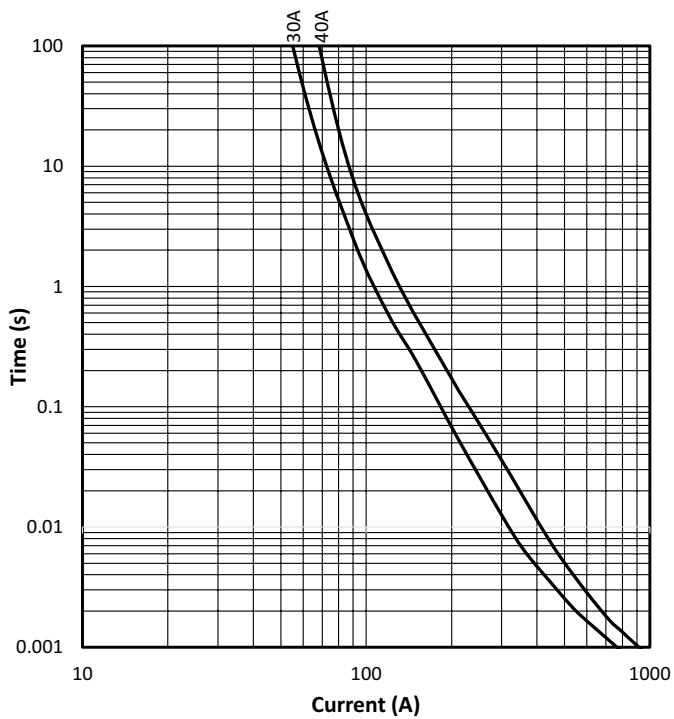
Packaging information

Terminals	Inner package	Ship package
T	50 pieces/tray	500 pieces/box

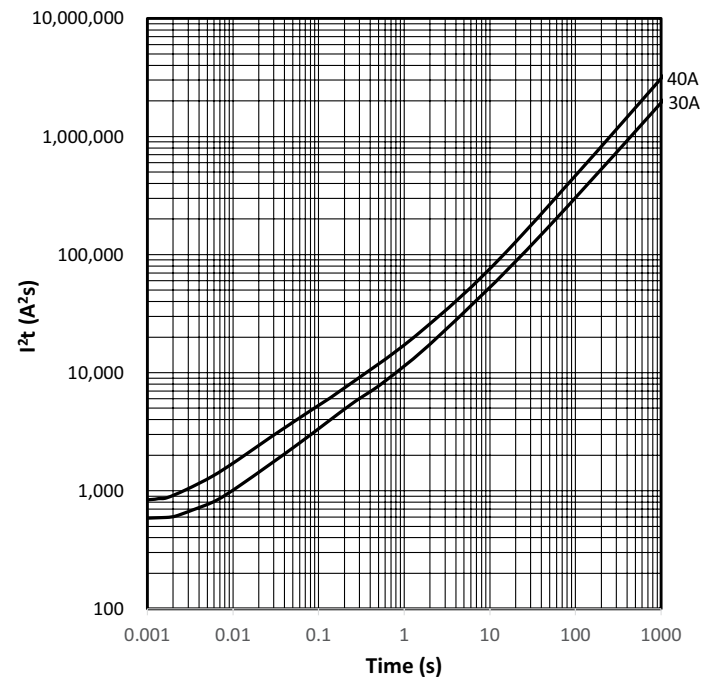
Temperature derating curve



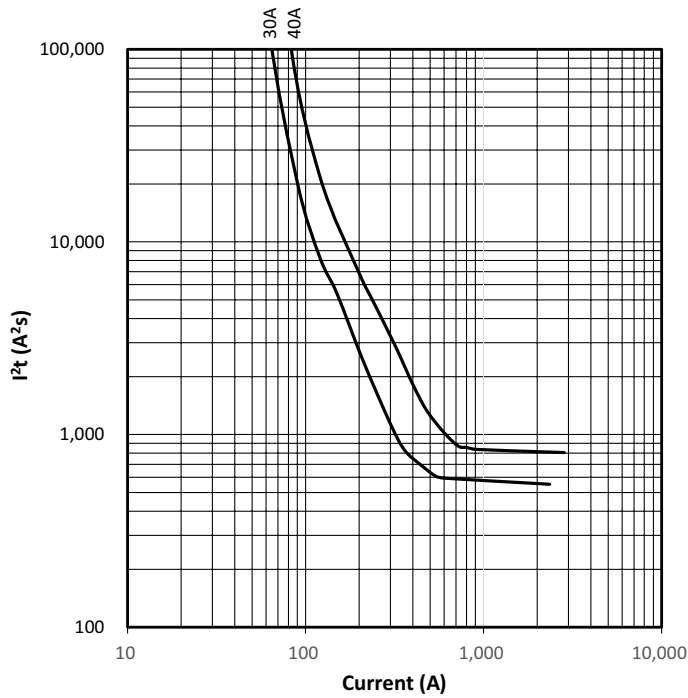
Current vs. time curve



I²T vs. time curve



I²t vs. current curve



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