# EUC10
10 x 25 mm EV fuse

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

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

Environmental compliance

Ordering part number

EUC10-30-T

Family code ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯
Ampere rating (30 = 30 A) ⎯⎯⎯⎯
Option code ⎯⎯⎯⎯⎯⎯⎯⎯⎯⎯
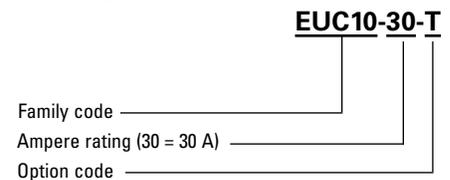
Option code

T= Bolt down terminal

Electrical characteristics

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

Product specifications

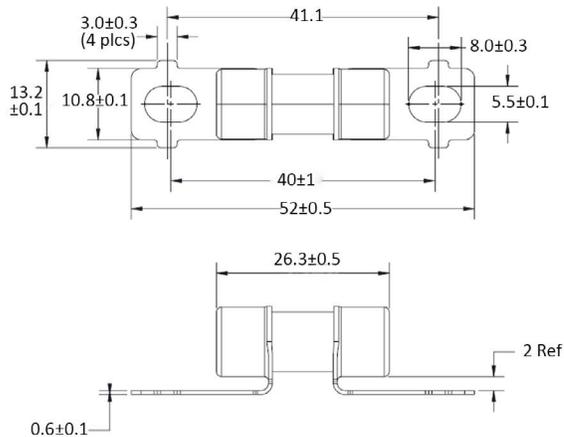| Part number	Rated voltage	Rated current (A)	Breaking capacity	Typical cold resistance[1] (mΩ)	Typical voltage drop (mV)	Power loss @ 0.5 In (W)
EUC10-30	500 Vdc	30	500 Vdc/20 kA	2.22	110	0.7
EUC10-40	500 Vdc	40	500 Vdc/20 kA	1.62	100	0.9

1. Cold resistance is measured at <10% In 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

3.0±0.3 (4 plcs)
41.1
8.0±0.3
13.2 ±0.1
10.8±0.1
5.5±0.1
40±1
52±0.5
26.3±0.5
10.8 dia ±0.15
2 Ref
14 max
0.6±0.1

Part marking

BUSS — Trademark
EUC10 — Family name
30A — Rated current
500Vdc — Rated voltage
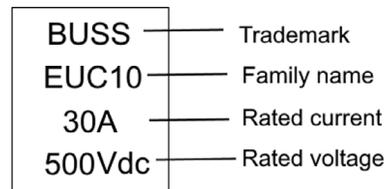
Note: recommended tightening torque is 4.5+/-1.0 Nm for M5 Screw

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.

Thermal shock: ISO8820-8 GB/T31465.6, 48 cycles; -40 °C to 100 °C, each cycle 60 minutes

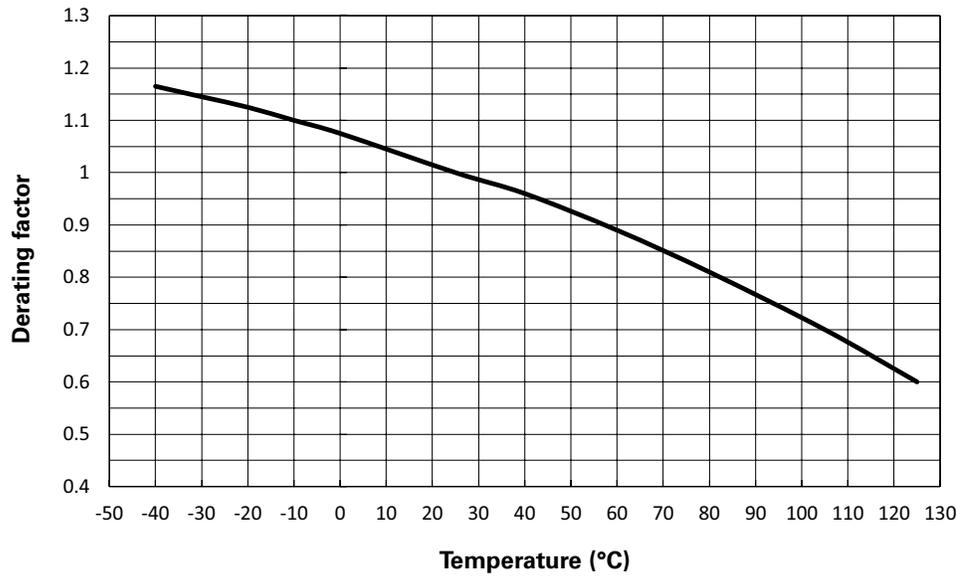Vibration: JASO D622 6.3.3, 10-55 Hz, 3 directions, 2 hours each direction

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
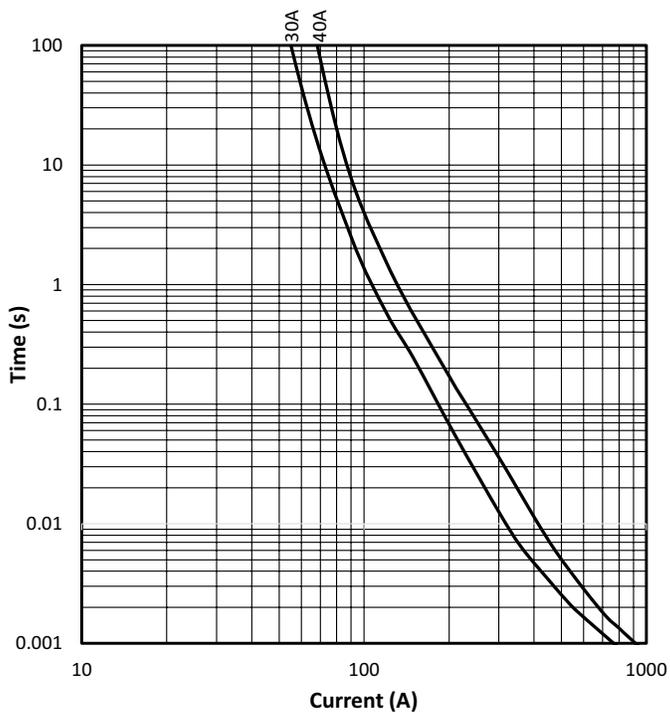
Packaging information

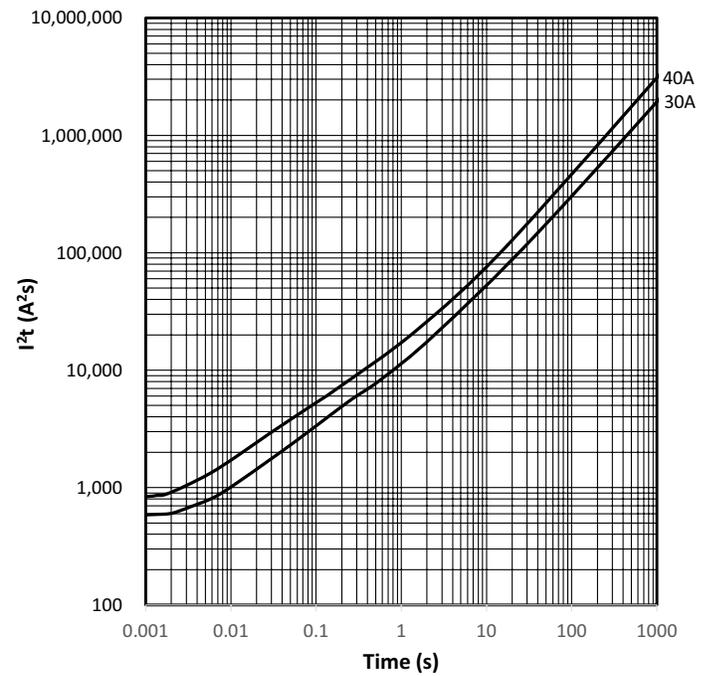| Terminals	Inner package	Ship package
T	50 pieces/tray	500 pieces/box

Temperature derating curve

Current vs. time curve

I²T vs. time curve

I²t vs. current curve

I²t (A²s) vs. *Current (A)* curve with 30A and 40A lines.

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