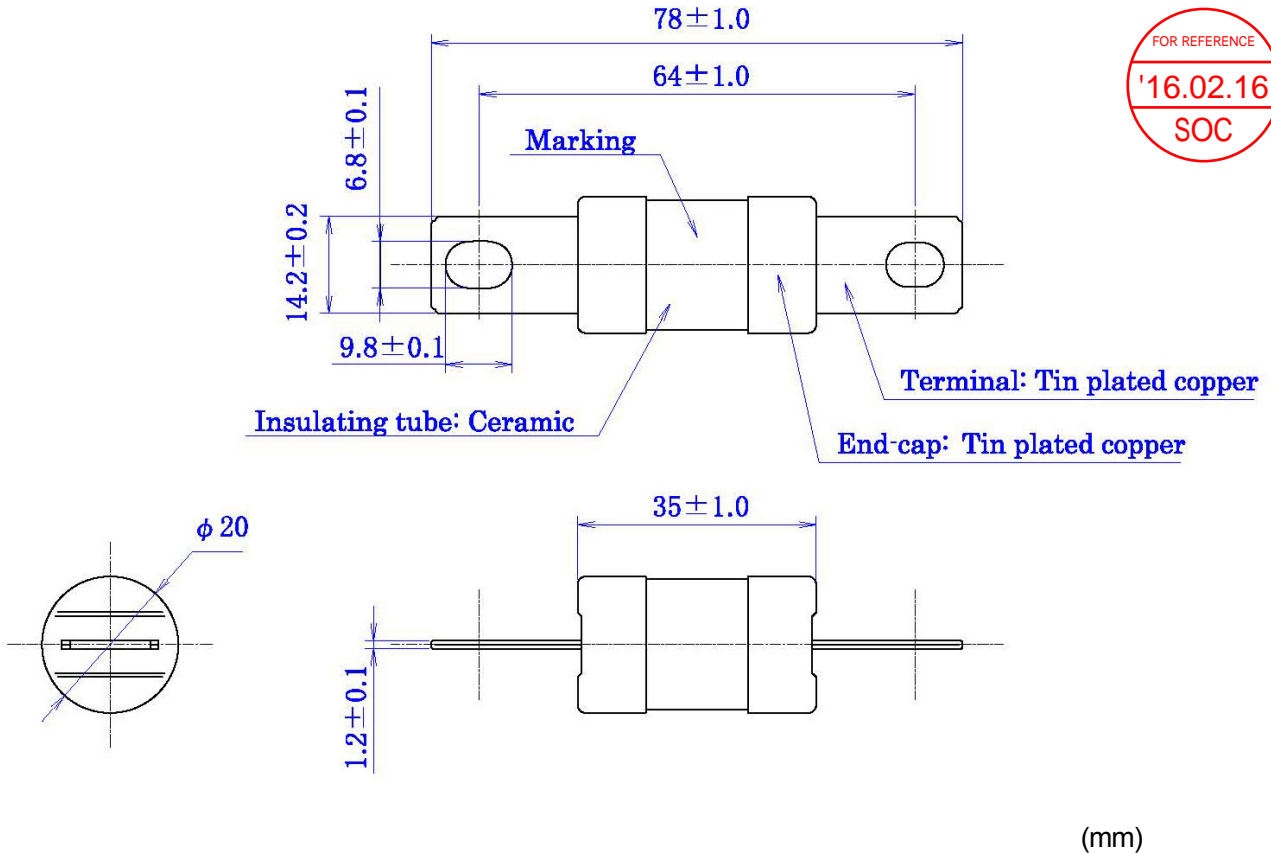


SOC product name DC500VPT2035 180A

Dimensions and construction



(mm)

Marking The following shall be marked on the insulating tube:
 SOC 180A
 DC500V

Electrical characteristics

Rated voltage	Rated current (I_N)	Rated breaking current		Temperature rise	Current carrying capacity	Overload operation
DC 500 V	180 A	2000 A	Resistive circuit	Not more than 50 K at 0.5 I_N on the external surface of the fuse	4 h or more at 1.1 I_N	2.0 I_N : 1.0 s-300 s 3.0 I_N : 0.2 s-30s 5.0 I_N : 0.05 s-1.0 s

Environment-related substances

The six hazardous substances (lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB), and polybrominated diphenyl ethers (PBDE)) specified in the EU RoHS Directive are not used intentionally in this product. This product conforms to the EU RoHS Directive 2011/65/EU. Lead content as impurities is not more than 0.1 wt%.

Mounting conditions

Mounting bolt: M6 bolt


Tightening torque: 6 ± 1 N·m




Application of excessive stress on a fuse body may damage the fuse. Make sure to secure the fuse terminal area when you tighten a bolt.

Safety Precautions When Selecting and Using Fuses


Read and follow these precautions before selecting and using fuses.

 **WARNING** : Failure to properly select, install, and use fuses can result not only in property damage but also serious injury and/or death.

■ Use fuses within their specification requirements.

 **WARNING** : Application of loads exceeding or outside the specification requirements may lead to nonoperation or nuisance operation of the fuse, disconnection of the fuse-element, and/or explosions, which may result in damage to property and/or bodily harm.

■ The electrical performance of the fuse may greatly vary depending on the various conditions of loads actually applied to it such as pulsed currents, ambient temperatures, and thermal and mechanical stresses. Consider all load conditions to be applied to the fuse when selecting it.

 **WARNING** : The electrical performance of the fuse may be significantly affected by external stresses applied to it, which may cause nuisance operation of the fuse, disconnection of the fuse-element, and/or explosions, resulting in damage to property and/or bodily harm.

■ Use this fuse in DC circuits. Be aware that the breaking ability of this fuse will differ depending on whether the circuit is an AC or a DC circuit.

■ Check for appropriate operation of the fuse at the voltage of the circuit in which the fuse is to be inserted. Select a fuse whose rated voltage is higher than the voltage of the circuit. Even when the rated voltage of the fuse is higher than the voltage of the circuit, however, the fuse may not operate when the circuit voltage is too small.

■ Do not use a fuse where it can be exposed to high humidity, corrosive gas and/or flammable gas. Doing so may result in nuisance operations, disconnection of the fuse-element, or explosions.

■ Turn off all power leading to the fuse before touching it. Failure to do so may result in electric shocks and/or serious burns.

■ Before final fuse selection, always test the proposed fuse in your actual equipment to ensure that the fuse satisfies all your operational and safety requirements.

■ Use sample fuses only for evaluation. Do not reuse sample or other used fuses. Properly dispose of fuses in accordance with local laws and regulations.

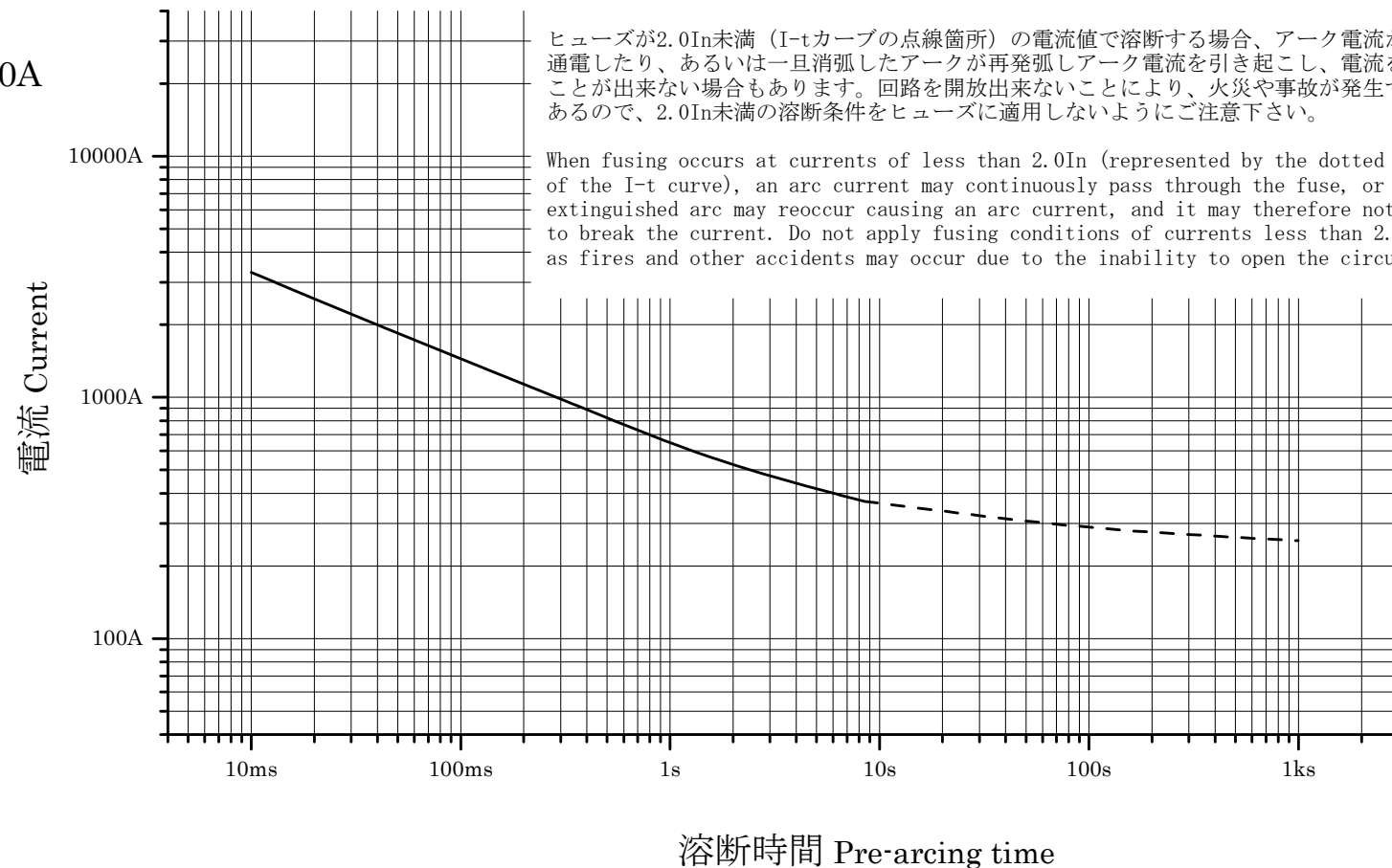
FOR REFERENCE ONLY (ご参考)

I-t Curve

このI-t特性図は、弊社が試験条件を特定して測定した実測値の平均値だけをプロットしてあります。参考値であり保証値ではありません。ヒューズの特性はその使用条件により変化しますので、お客様にヒューズのご使用条件下で、ヒューズがお客様のご要求を満足しているかを実際にご確認頂く必要があります。

This I-t curve is a plot of the average values of the measurements obtained under conditions specified by our company. These data are for reference only and are not intended to infer any guaranteed values. The characteristics of the fuse may vary depending on the usage conditions. Always test the fuse under the actual circuit conditions.

Type:DC500VPT2035 180A
Control No.: 141126



FOR REFERENCE ONLY(ご参考)

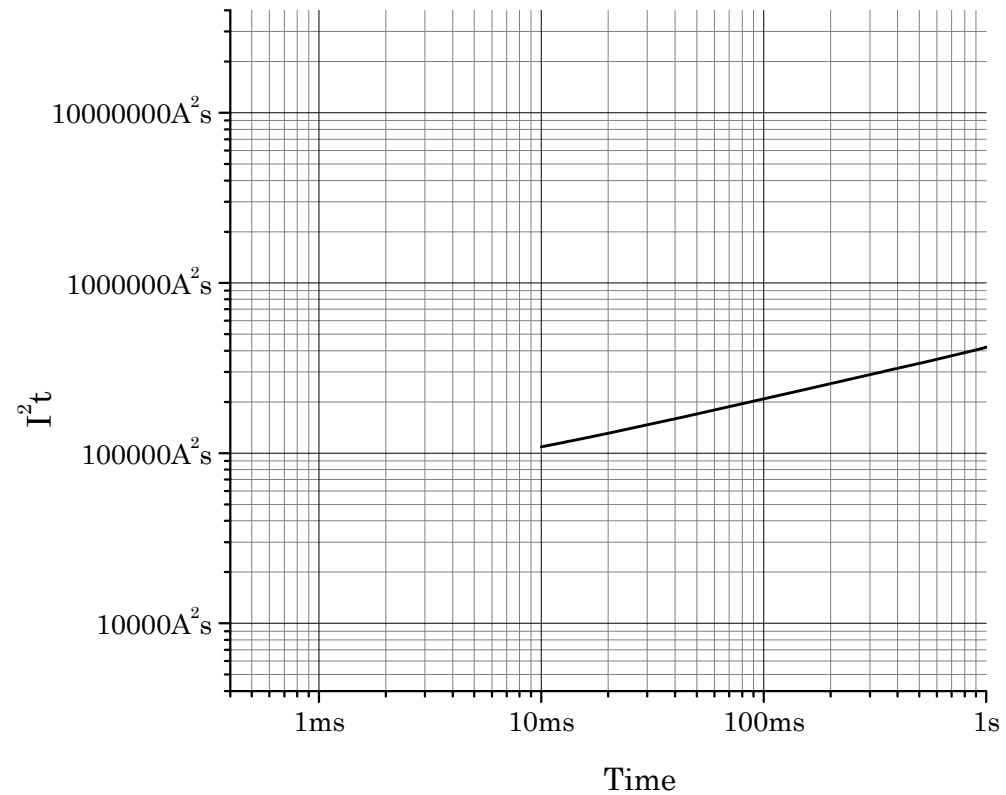
I²t-t Curve

このI²t-t特性図は、弊社が試験条件を特定して測定した実測値の平均値だけをプロットしてあります。参考値であり保証値ではありません。ヒューズの特性はその使用条件により変化しますので、お客様にヒューズのご使用条件下で、ヒューズがお客様のご要求を満足しているかを実際にご確認頂く必要があります。

This I²t-t curve is a plot of the average values of the measurements obtained under the conditions specified by our company. These data are for reference only and are not intended to infer any guaranteed values. The characteristics of the fuse may vary depending on the usage conditions. Always test the fuse under the actual circuit conditions.

Type: DC500VPT2035 180A

Control No.: 141126



周囲温度の影響－定格電流値のリレーティング

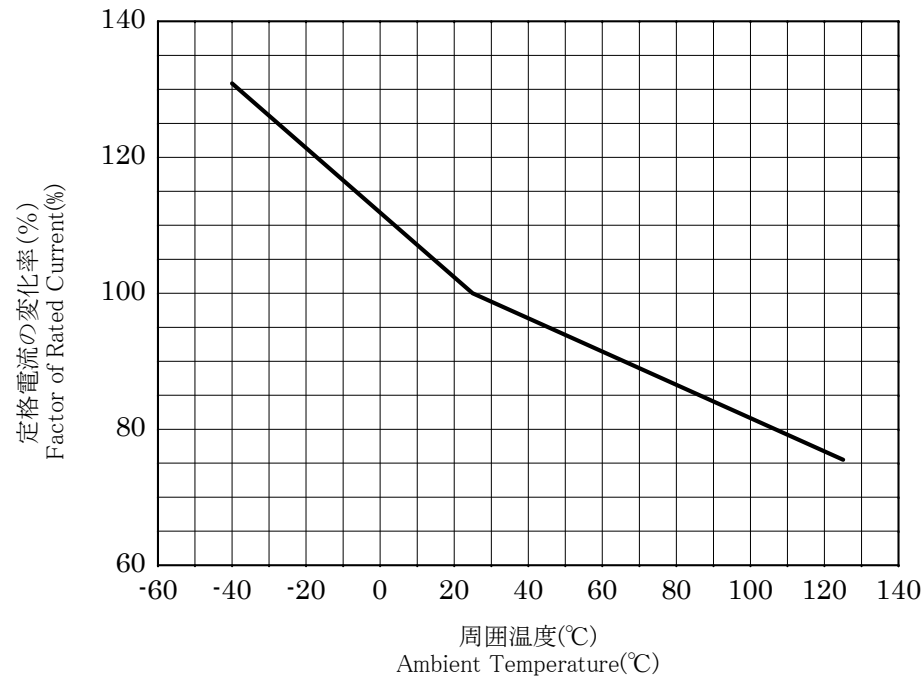
Influence of Ambient Temperature - The Re-rating of the Rated Current

この周囲温度に対する定格電流の変化を示すグラフは、周囲温度-40 °C、25 °C 及び 125 °C に於いて弊社が特定した条件で測定した3点の実測値であり、お客様での実使用条件を考慮したものではありません。ヒューズの特性はその使用条件により変化しますので、お客様にヒューズのご使用条件下で、ヒューズがお客様のご要求を満足しているかを実際にご確認頂く必要があります。

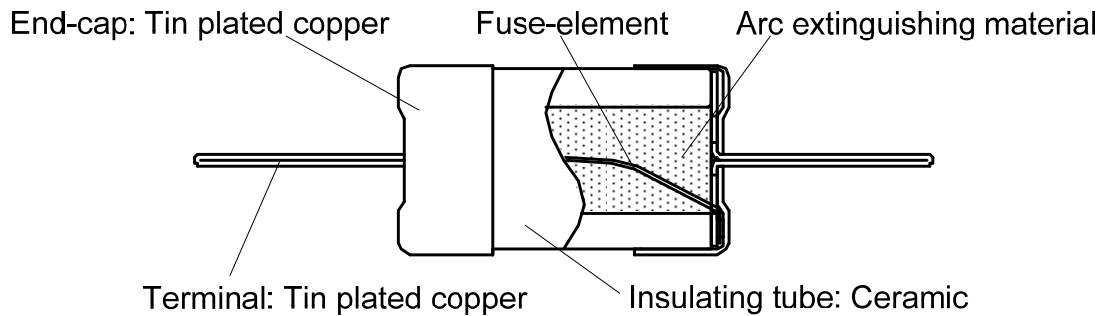
This chart is a plot of the measurements obtained at the ambient temperatures of -40 °C, 25 °C and 125 °C under conditions specified by SOC. The conditions of your actual application are not considered in this chart. These data are for reference purposes only and are not intended to infer any guaranteed values. Fuse characteristics may vary depending on the usage conditions. Always test the fuse under the actual circuit conditions.

Type: DC500VPT2035 180A

Control No.: 141126



1. Construction



2. Usage conditions

Ambient temperature: -40 °C--+125 °C

Note: The current carrying capacity of the fuse may vary depending on the ambient temperature.

Ambient humidity: 85% RH or less

3. Storage conditions and storage period

Products packaged as delivered can be stored for one year after shipping from SOC.

Ambient temperature: -30 °C--+40 °C (No condensation)

Ambient humidity: 85% RH or less

Ambient atmosphere: Not exposed to corrosive gas or sea breeze.

No visible dust.

Not exposed to direct sunlight.

Load: No application of load that may cause deformation or degradation of the product.

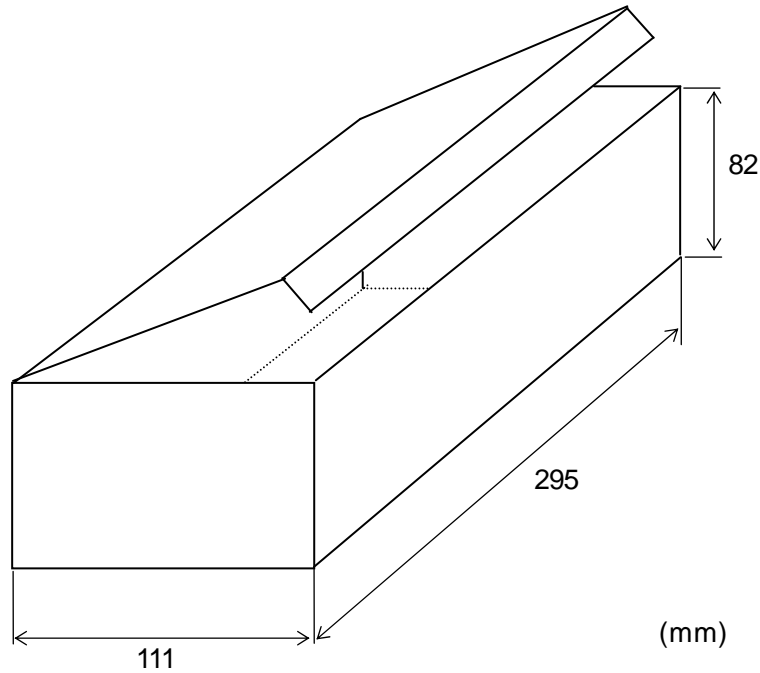
4. Typical cold resistance (for reference only)

0.47 mΩ



1. Fuses to be delivered shall be packed as follows:

- (1) 40 fuses are packed into a cardboard case shown in the figure below. If the number of fuses to be packed in is less than the fixed number, the packaging specification shall be applied except for the number decreased as required
- (2) The following are indicated on the surface of the cardboard case:
 - Your part number (by request)
 - Quantity of fuses
 - Packaged date
 - Country of origin
 - Manufacturer
 - Production facilities
 - Lot number



2. Lot number

The lot number indicates the following:

