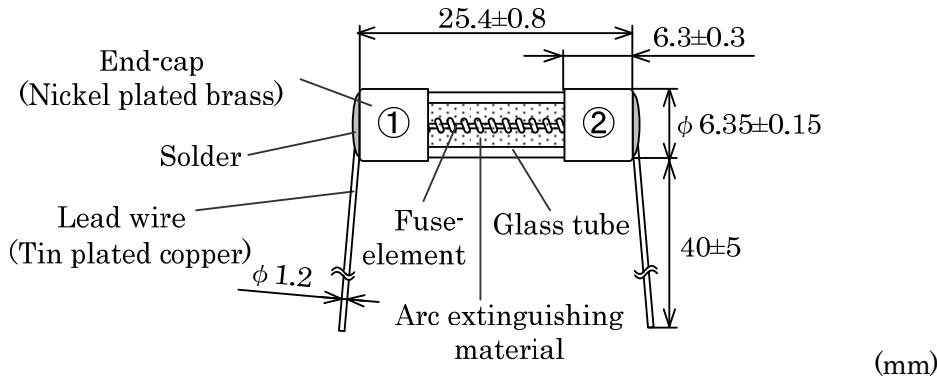


Basic Specifications for SHV27 Series

SOC product name SHV27 “Rated current”

Certification UL248-1, UL248-14 C-UL US Recognized Rated currents 6.3A, 8A-30A
 Use of Recognized Component Mark for Canada and the United States is approved by UL when UL has tested and evaluated the products in accordance with the UL and the CSA standards.

Dimensions and construction



Marking

<Rated current 6.3A>

Marking ①: SOC “Rated current”

Marking ②: DC450V SHV27

<Rated currents 8A-30A>

Marking ①: SOC “Rated current”

Marking ②: DC420V SHV27

Electrical characteristics

Certification	Rated voltage	Rated current (I _N)	Rated breaking current		Temperature rise	Current carrying capacity	Overload operation
C-UL US	DC450V	6.3A	400A	Resistive circuit	Not more than 120 K at 1.0 I _N	1.0 I _N until temperature stabilization occurs.	Within 30 min at 2.1 I _N
	DC420V	8A-30A					

Rated currents

Your part number	SOC product name	Rated current
	SHV27 6.3A	6.3A
	SHV27 10A	10A
	SHV27 15A	15A
	SHV27 20A	20A
	SHV27 25A	25A
	SHV27 30A	30A

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, except high melting temperature type solders, containing 85 wt% or more lead, that are exempted from the Directive. This product conforms to the EU RoHS Directive 2011/65/EU.

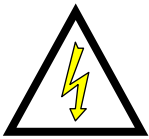


Safety Precautions When Selecting and Using Fuses

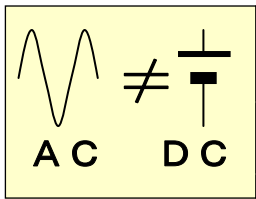
WARNING: Read and follow these precautions before selecting and using fuses. Failure to properly select, install and use fuses can result in serious injury, death or property damage. Before final fuse selection, always test the proposed fuse in your actual equipment to ensure that the fuse satisfies all your operational and safety requirements.



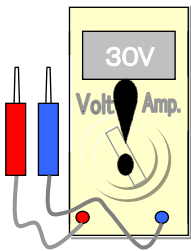
Use the fuses within the specification requirements. Exceeding specification requirements may result in injury, death or fire.



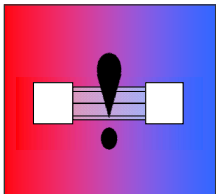
Shut down the power before touching the fuse. Failure to do so may result in electrocution or serious burns.



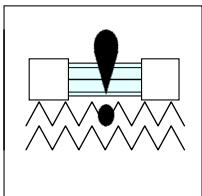
Be aware that the breaking ability of a fuse will differ depending on whether the circuit is an AC or a DC circuit. Fuses intended for use in AC circuits should therefore not be employed in DC circuits, and vice versa, as this may result in accidents such as explosion, property damage, and serious injury.



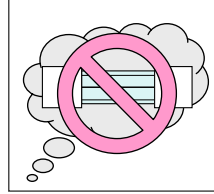
Check if the circuit voltage is large enough for the fuse operation. When the circuit voltage is too small, the fuse may not operate even though an abnormal current passes through it, because the current decreases due to the increase of the fuse resistance.



Consider the effect of the ambient temperature when you use the fuse. Electrical performance of the fuse may vary depending on the temperatures.



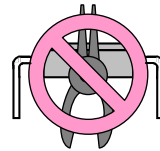
Use the fuse in a place where the vibration and impact levels are within the specified limits. Exceeding these limits may result in disconnecting the fuse-element.



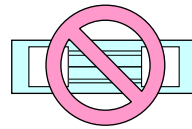
Do not use the fuse where it is exposed to high humidity, corrosive gas, and flammable gases. Doing so may result in nuisance operations, disconnection of the fuse-element, or explosion.



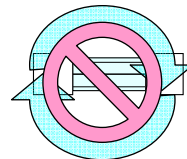
Do not apply ultrasonic cleaning to the fuse. Ultrasonic cleaning may result in disconnection of the fuse-element.



Do not form the lead when the protector is 40 °C or more. Lead forming when the protector is 40 °C or more may result in disconnection of the fuse-element because the load is applied to the fuse-element.



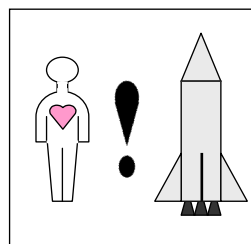
Do not apply coating or potting to the fuse. Doing so may result in disconnection of the fuse-element or a change in the fuse's characteristics.



Use sample protectors only for evaluation. Do not reuse used protectors. Properly dispose of used protectors.



When inserting a protector into a fuseholder, avoid forcing it. This may result in the protector cracking or contact failure which will significantly reduce its ability to work properly or shorten its life.



When the fuse is used for a life support system or equipment that requires high reliability, more closely examine and evaluate the fuse in actual circuit conditions than is necessary for other general electronic equipment.

FOR REFERENCE ONLY(ご参考)

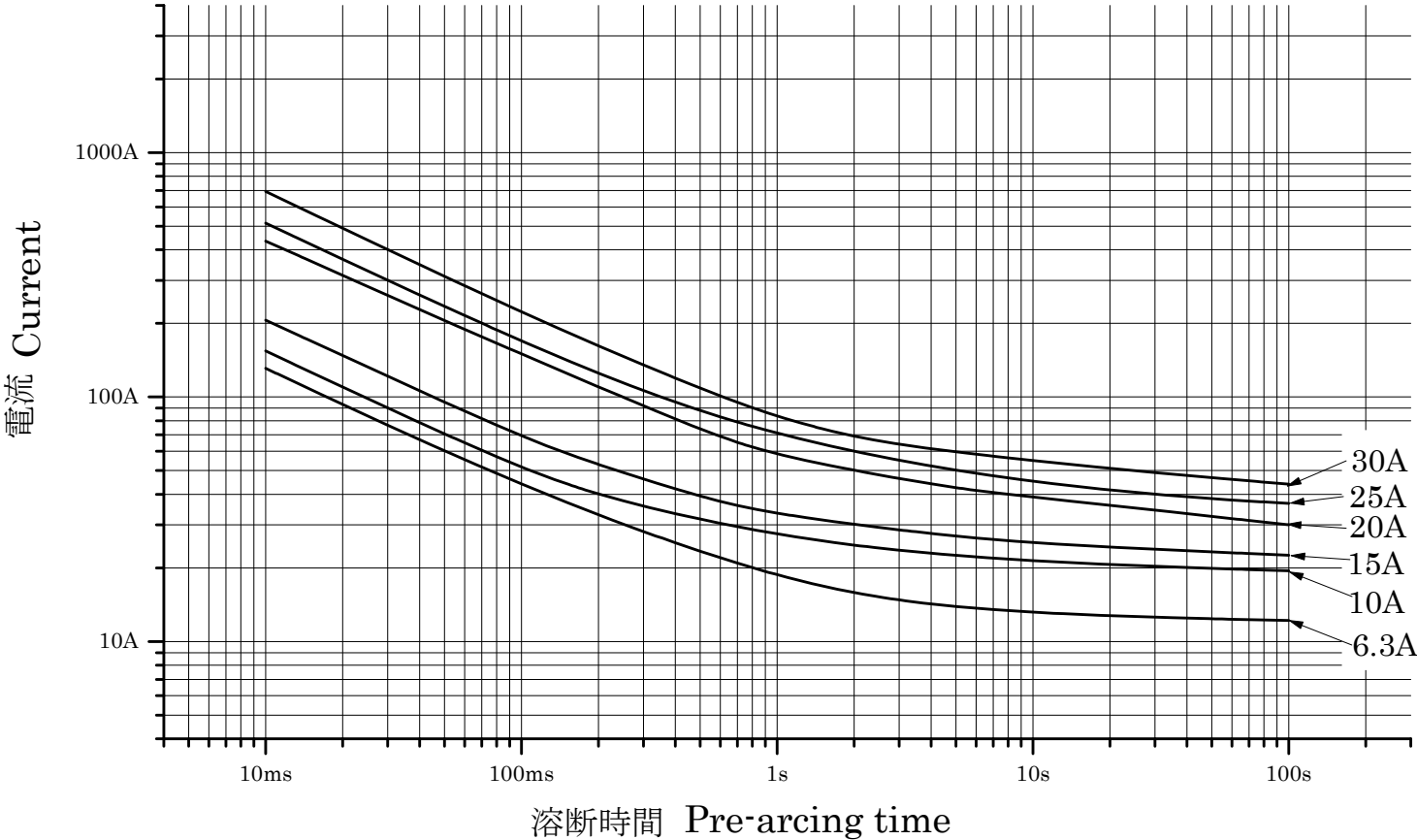
I-t Curve

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: SHV27

Control No.: 120424



FOR REFERENCE (ご参考)

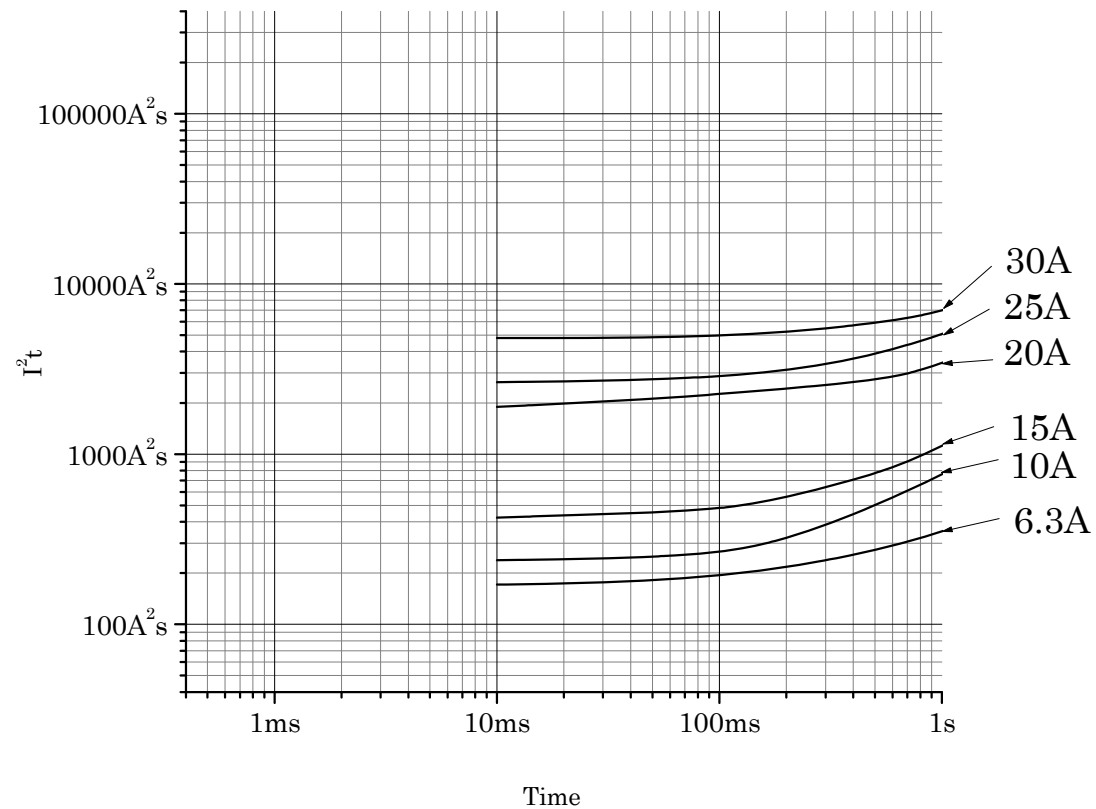
I^2t Curve

この I^2t - 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^2t 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: SHV27

Control No.: 120424



FOR REFERENCE ONLY (ご参考)

周囲温度の影響－定格電流値のリレーティング

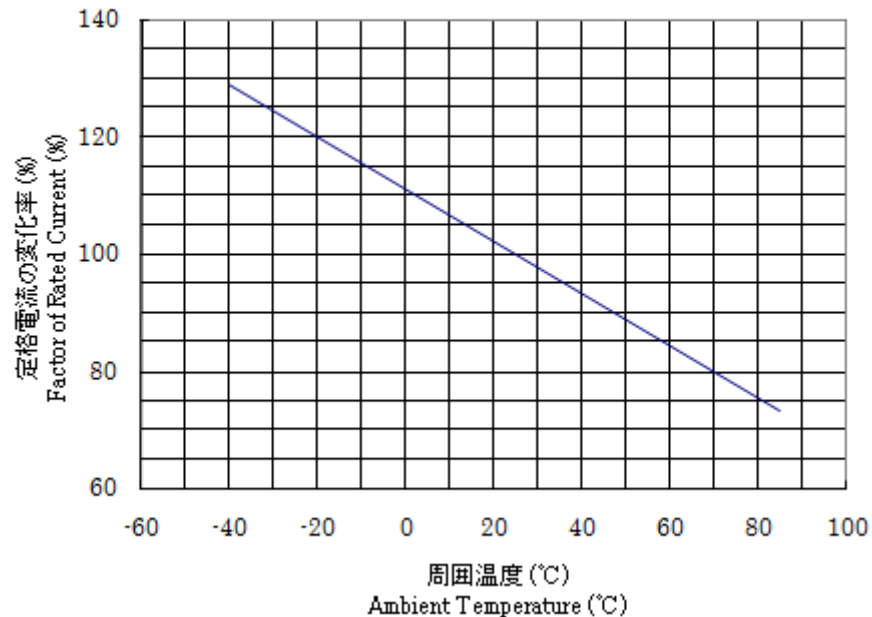
Influence of Ambient Temperature - The Re-rating of the Rated Current

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 85 °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 85 °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: SHV27 30A

Control No.: 120501



SOC Corporation

《Technical specification》 (SHV27 30A)

1. Usage conditions

Ambient temperature: -40 °C—+85 °C

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

Ambient humidity: 85 % RH or less

2. Typical cold resistance (for reference)

2.0 mΩ

