FOR SAFE USE / PRODUCT WARRANTY

Breaking current

- Maximum breaking current
 - Assume that the current breaking capacity of the fuse is greater than the maximum broken current of the circuit.
- Minimum breaking current
 Use the fuse with other protection equipment as there may be a possibility of a restrike arc after fusing if an accidental current in the circuit is below the minimum breaking current.
- Circuit time constant

When using for a direct-current circuit, use it under the time constant prescribed by the breaking capacity (or reduce the voltage by its circuit time constant).

FOR SAFE USE



- Installation/removal, wiring work, maintenance, and inspection must be done by an expert.
- Do not use under an abnormal environment such as a place with high temperature and/or high humidity, a dusty place, a place filled with corrosive gas, or a place that may be subject to physical vibrations and/or shock.
- Do not expose to any liquids.
- Make sure that the terminal is securely tightened. Using a loose terminal may cause a fire.
- Use a wire suitable for the working voltage and the conduction current. When it is used with incomplete wiring, it may cause a fire.
- Do not dismantle or remodel the product.
- Do not use the fuse if you find any damage or alterations while unpacking.
- Use below the rated voltage of the fuse. If exceeded, a burnout or an explosion may occur.
- Use the fuse such that its current breaking capacity is not exceeded. If exceeded, a burnout or an explosion may occur.
- When using for the following equipment or purposes, consult our business desk and finalize specifications for delivery.
 Safety and security in design and use are the user's responsibility.
 - Use on equipment or for a purpose that may directly result in injury or death such as medical equipment.
 - •Use on a train, an elevator, and so on that may endanger human lives.
 - Use on equipment or use for purposes that may involve a shock or a vibration, such as when loading on a vehicle or a ship.
 - Use on equipment or for purposes that may have a serious effect on society and/or public (e.g., in a traffic system).
 - In the case of current rise sharply when short-circuited
 - •Use on equipment or use for purposes related to the above.
- When storing, transporting, or moving the fuse, make sure to follow the precautions below and store and transport it properly.
 Fall ·This side up ·Use of cushioning material Excessive shocks on the top, bottom, left and right may cause damage.
- Do not use a fuse which was fallen from height such a working desk in the process of assembly.
 - *If you use a fuse that have internal damaged by dropped or a condition that as close as it, an unexpected cutoff or unusual cutoff of the fuse may cause a serious accident.



- When used in a DC circuit, Please use that it is less than or equal to the cutoff capacity time constant (or use by adjusting the voltage lower depending on time constant). Even if it is lower, if the current rises sharply, there is a risk of burnout or an explosion.
- When there is a possibility of block-off below the minimum breaking

- current, take measures such as using other means of protection in addition to the fuse. When no measures are taken, it may cause a burnout or an explosion.
- When the fuse blocks off, the welding arc voltage occurs between the fuse poles, so be sufficiently careful about arrangement of parts around the fuse.
- A fuse protecting a semiconductor becomes hotter than other general parts even under normal conditions.
 - Touching the fuse may cause burns when the equipment is turned on or after an accidental block-off; attach a label to call attention to the high temperature near the fuse installed on the equipment.



• Be careful not to touch a fuse by hand when an electric current is flowing; it may cause an electric shock.

When installing the product on equipment, make sure that a shock-guard protector is attached to the fuse or a label is put nearby to indicate the danger of electric shock.

PRODUCT WARRANTY

Period of Warranty

The period of warranty is one year from the date of delivery.

Scope of Warranty

We will re-deliver the same product or a substitute product promptly in case a product defect causes an inconvenience during the above warranty period. However, the following exceptions apply:

- 1. When the inconvenience is due to the customer's decision when adopting the product.
- When an inconvenience occurred that could not be predicted in a performed evaluation test.
- When the product was exposed to physical, chemical, and/or electrical-engineering-related stress without the manufacturer's consent.
- 4. When it was difficult to perceive the concerned defect with the level of science and technologies of both the manufacturer and the customer at the time of the product delivery.
- 5. When the defect is based on directions of the customer who was engaged in its design.
- When the malfunction is due to a reason not deriving from the supplied products.
- 7. When the product defects are due to remodeling by someone other than the manufacturer, or when the product defects are caused by violating conditions about the specifications and/or storage that are determined by the manufacturer.
- 8. When the supplied product is used, without the manufacturer's prior consent, in situations in which the product defects could harm human lives or cause great physical damage to occur.

Notice about the Warranty

- Note that compensations are made through the delivery of a replacement or substitute in all cases.
- 2. When using our fuse for a market where high reliability and safety are required, take precautions in the design of, and security measures for, the applicable device at your own responsibility.
- 3. If a malfunction or a breakdown of unknown origin causing fusing occurs remove the fuse as-is and return it to our office.
- 4. For the AMS series, the warranty is also in accordance with the warranty conditions of the microswitch manufacturer as well as those mentioned above. Refer to the warranty of the microswitch manufacturer.

Note that the descriptions in this catalog are subject to change without notice for product improvements or for other reasons. Various graph data are reference values,