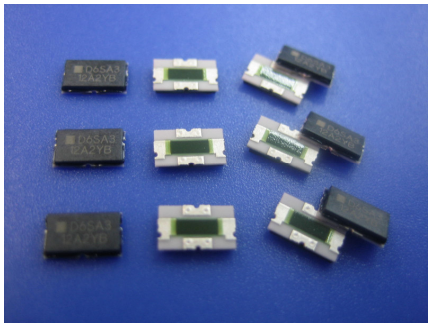
SEFUSE D6 - SMD type

- Abstract
  - We have been supplying the protection device for rechargeable battery, D6 series for long time. And now we developed " D6-SMD type" for your convenience mounting. This SMD type has the same structure and quality control in the process as the traditional for the superior reliability.
- Application areas
  - Notebook PCs
  - Tablet PCs
- Features
  - Thinnest type
  - RoHS compliant
  - Antimony-free
  - Halogen-free
  - High reliabilities



D6 – SMD type

Appearance - Marking

- Experience
  - D6 SMD type has the same structure as the current D6 type and produces in the production line with QC gate for D6 type has superior experience in the market.
- Specifications

Part number	D6SA2–12	D6SA3–12	D6SA4–12
Applicable series cell number	1 and 2	3	4
Electrical ratings	12A / 36V DC		
Fuse resistance	2.0 ± 1.0 mΩ		
Applicable voltage range	4.0 – 9.0V	7.4 – 13.8V	10.5 – 19.6V
Heater resistance	2.15Ω ±20%	7.3Ω ±20%	14.7Ω ±20%
Applicable wattage range	6.2 – 47.1 W	6.3 – 32.6 W	6.3 – 32.7 W

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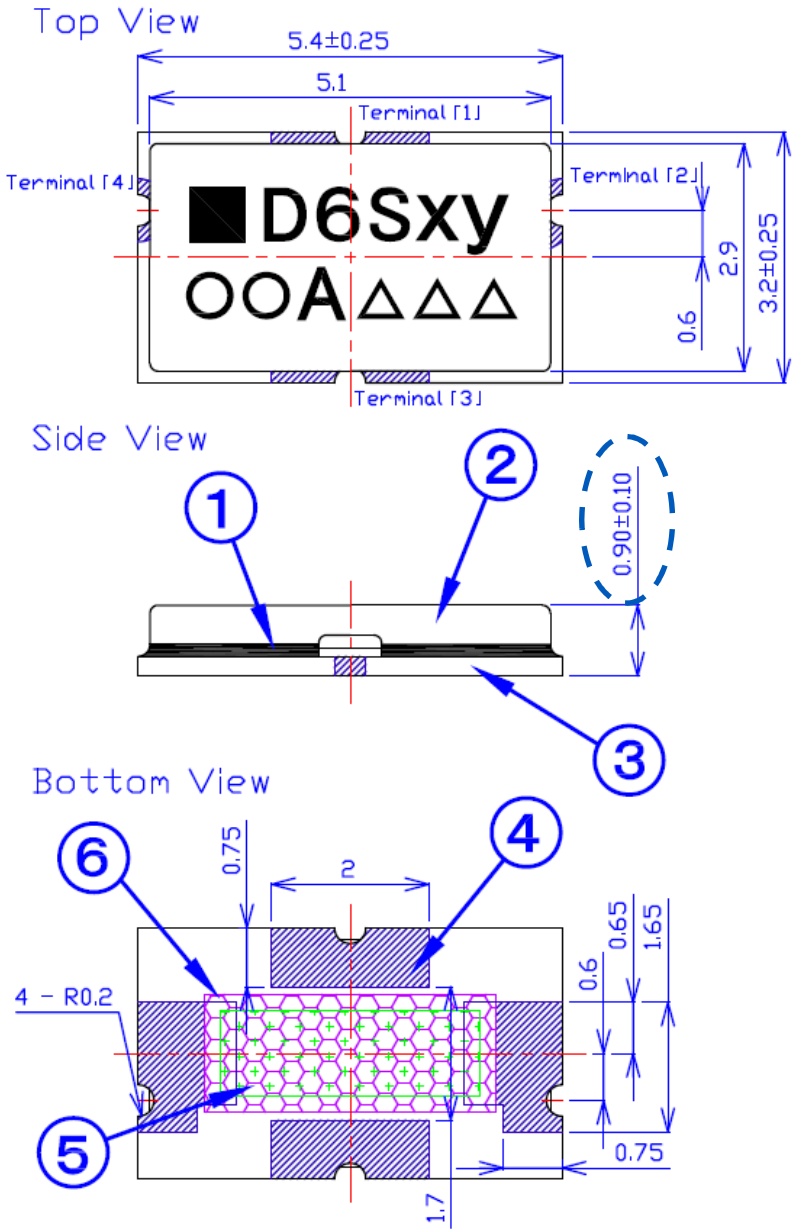
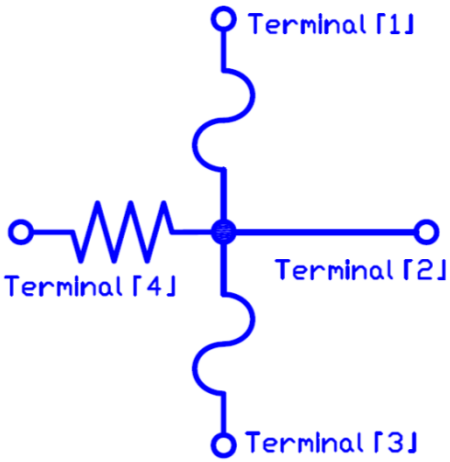
Drawing



Marking

D6S・・Series name
x・・・・Developing code
y・・・・Heater resistance code
OOA・・Rated current
ΔΔΔ・・Lot Number

Wiring diagram



Parts No.	Material
①	Resin
②	Plastic cap
③	Ceramic base
④	Electrode
⑤	Resistance
⑥	Insulation glass

Note
-Tolerance is ±0.2mm.
-Numerical treatment of measured value depends on JIS Z8401.
-Cracks of the ceramic part's edge that do not influence the product characteristic is acceptable.

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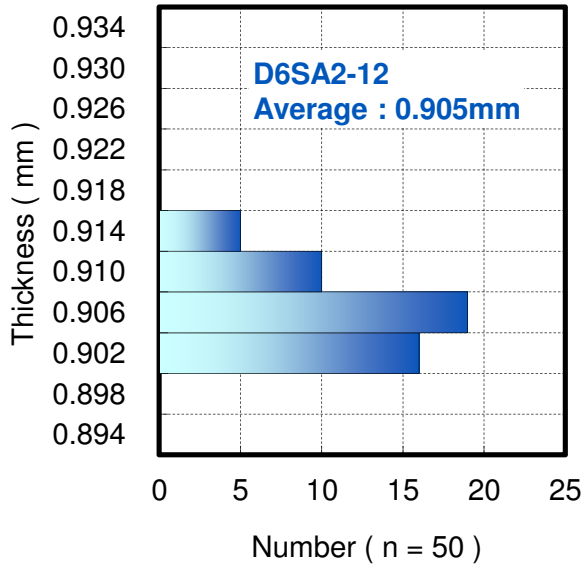
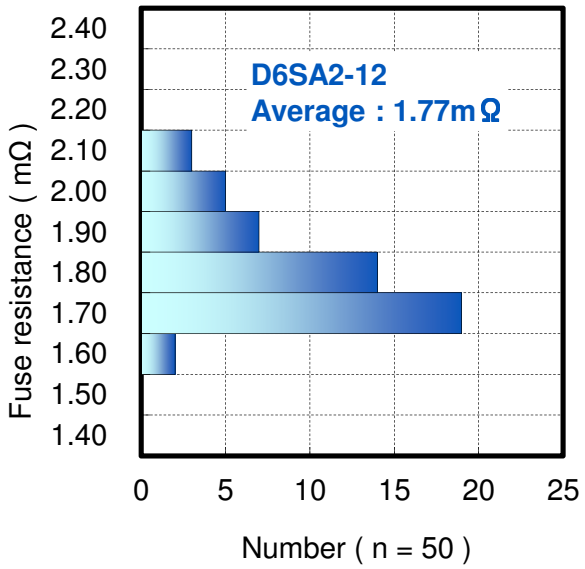
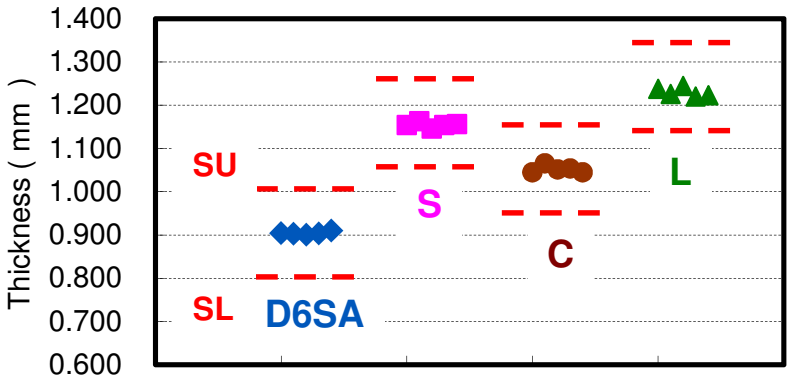
Thickness



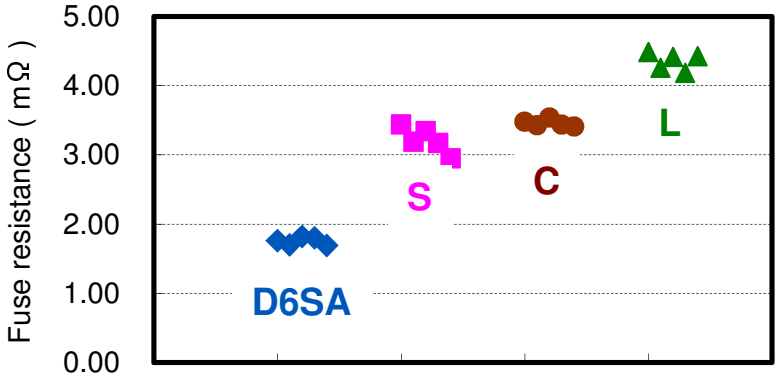
Fuse resistance



Comparison of thickness



Comparison of Fuse resistance



The value contained in this document were obtained under certain testing conditions by us.
They are not guaranteed and are for reference only.

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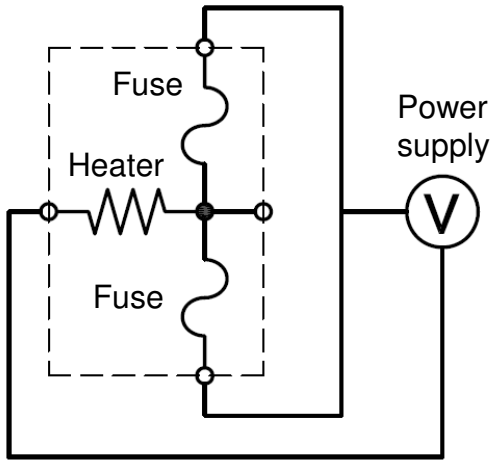
Heater operation

The battery fuse measures time until both of the fuse operated in heater operation test.

The voltage is calculated by following formula from the heater resistance.

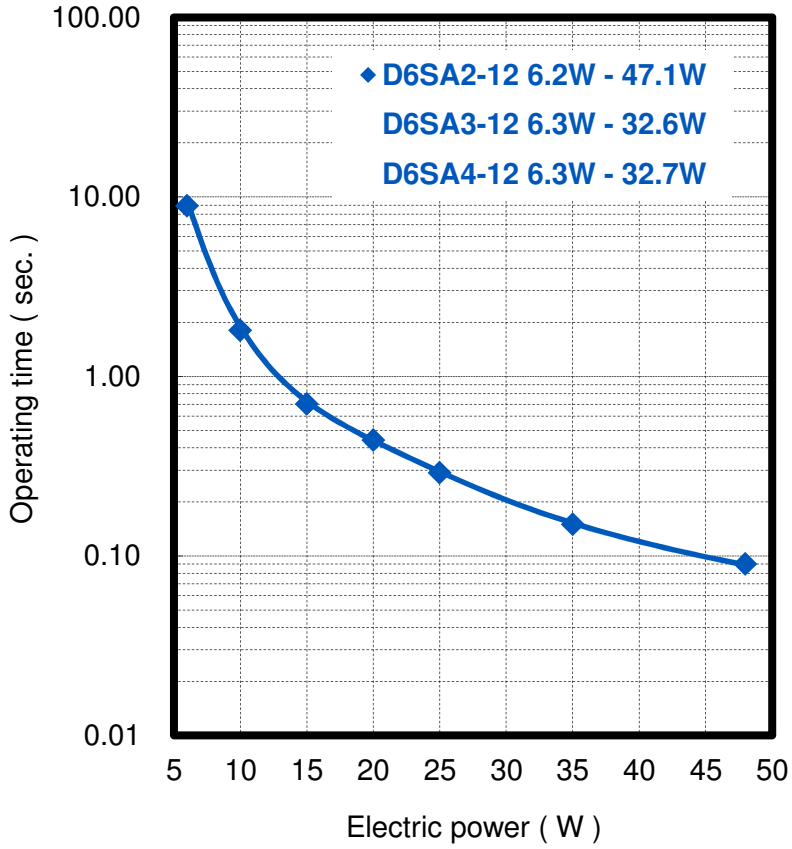
$$V = \sqrt{W \times R}$$

V : Voltage
W : Operating Electricity
R : Heater resistance



Test circuit

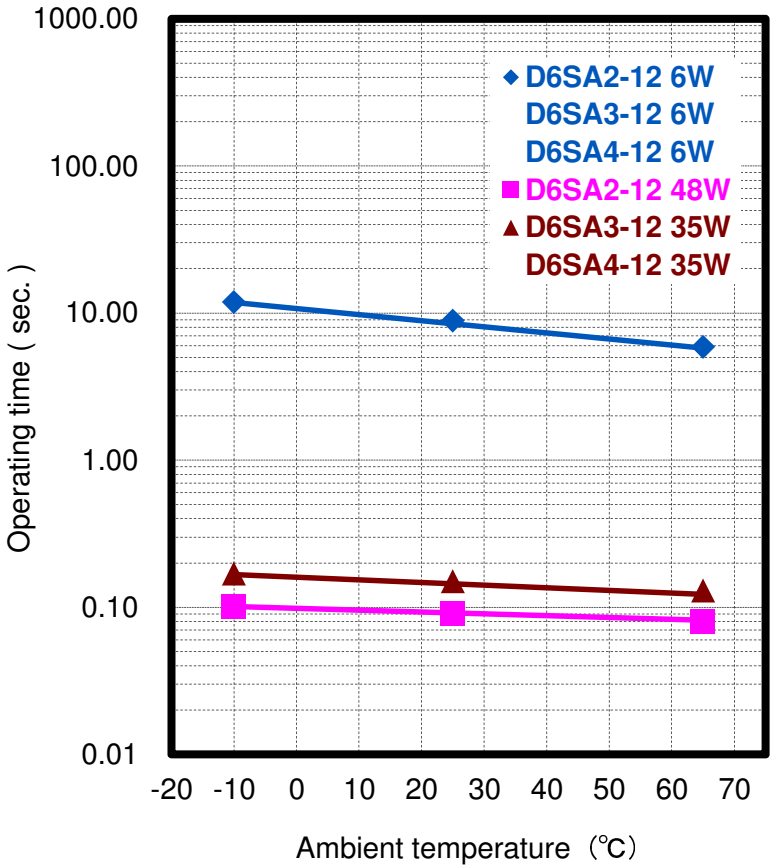
Electric power operating time at 25℃



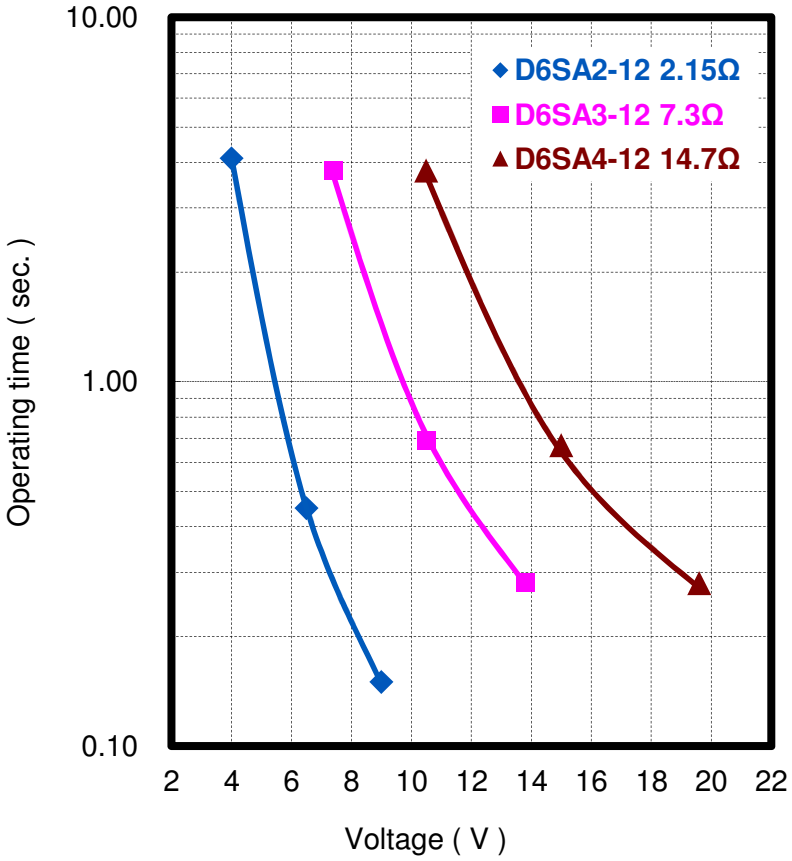
Please refer to slide8 for test method.

Heater operation

Operating time VS ambient temperature



Voltage operating time at 25℃



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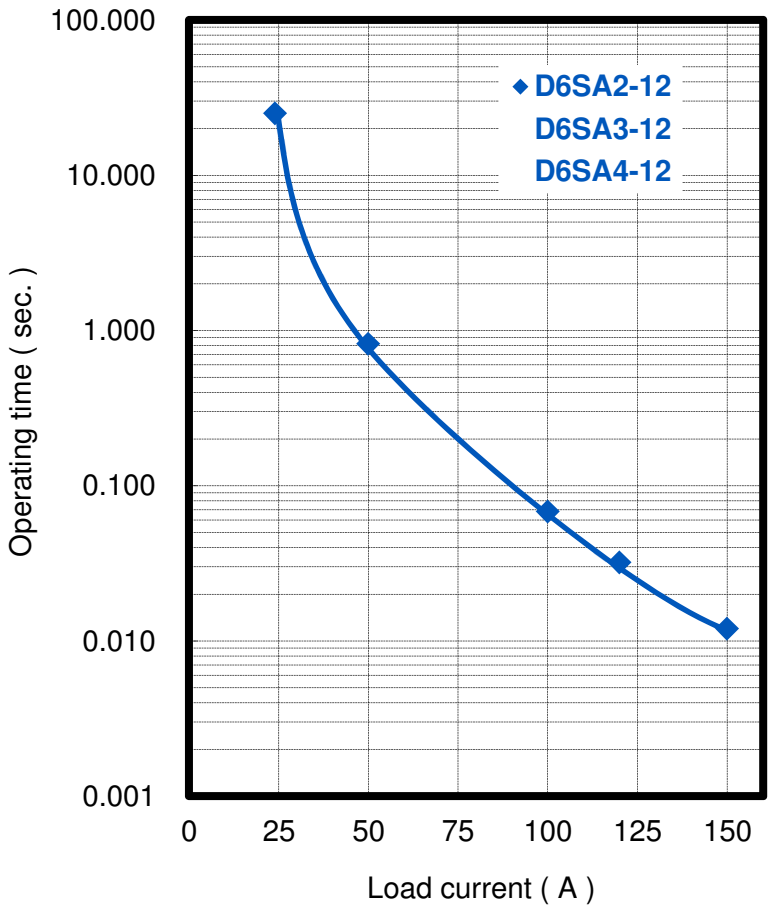
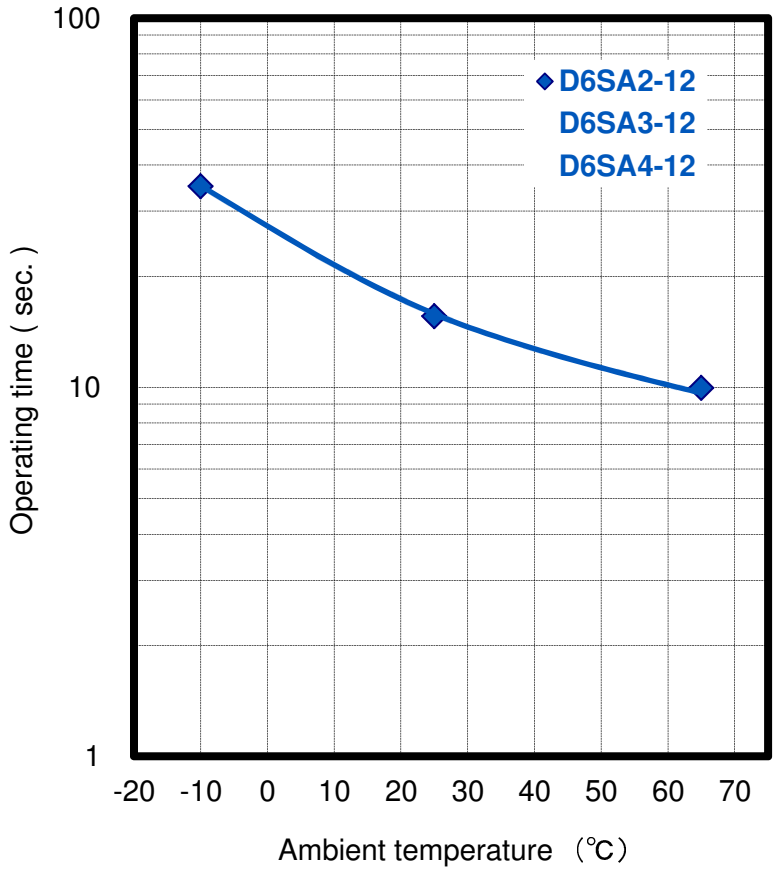
Current operation

Current operating time at 25℃



Operating time by 2 * rating current VS ambient temperature



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