



# DZ3S068D0L

## Silicon epitaxial planar type

For surge absorption circuit

### ■ Features

- Excellent rising characteristics of zener current I<sub>Z</sub>
- Low zener operating resistance R<sub>Z</sub>
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL:Level 1 compliant)

### ■ Marking Symbol:02

### ■ Packaging

Embossed type (Thermo-compression sealing) 3 000 pcs / reel (standard)

### ■ Absolute Maximum Ratings Ta = 25 °C

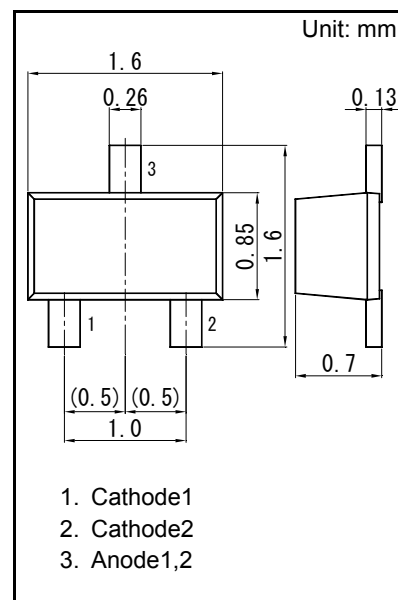
| Parameter                             | Symbol           | Rating      | Unit |
|---------------------------------------|------------------|-------------|------|
| Total power dissipation <sup>*1</sup> | PT               | 150         | mW   |
| Electrostatic discharge <sup>*2</sup> | ESD              | ±10         | kV   |
| Junction temperature                  | T <sub>J</sub>   | 150         | °C   |
| Operating ambient temperature         | T <sub>opr</sub> | -40 to +85  | °C   |
| Storage temperature                   | T <sub>stg</sub> | -55 to +150 | °C   |

Note) <sup>\*1</sup>: Mounted on glass epoxy print board. ( 45 mm x 45 mm x 1 mm)

(2 Diode total)

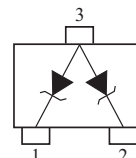
Solder in ( 0.6 mm x 0.6 mm)

<sup>\*2</sup>: Test method:IEC61000\_4\_2(C = 150 pF,R = 330 Ω, Contact discharge:10 times)



|           |              |
|-----------|--------------|
| Panasonic | SSMini3-F3-B |
| JEITA     | SC-89        |
| Code      | SOT-490      |

### Internal Connection



### ■ Electrical Characteristics Ta = 25 °C ± 3 °C

| Parameter                                              | Symbol          | Conditions              | Min  | Typ | Max  | Unit  |
|--------------------------------------------------------|-----------------|-------------------------|------|-----|------|-------|
| Forward voltage                                        | V <sub>F</sub>  | I <sub>F</sub> = 10 mA  |      |     | 1.0  | V     |
| Zener voltage <sup>*1, *2</sup>                        | V <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   | 6.46 |     | 7.14 | V     |
| Zener operating resistance                             | R <sub>Z</sub>  | I <sub>Z</sub> = 5 mA   |      |     | 30   | Ω     |
| Zener rise operating resistance                        | R <sub>ZK</sub> | I <sub>Z</sub> = 0.5 mA |      |     | 60   | Ω     |
| Reverse current                                        | I <sub>R</sub>  | V <sub>R</sub> = 4 V    |      |     | 0.1  | μA    |
| Temperature coefficient of zener voltage <sup>*3</sup> | SZ              | I <sub>Z</sub> = 5 mA   |      | 3.1 |      | mV/°C |

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 Measuring methods for Diodes.

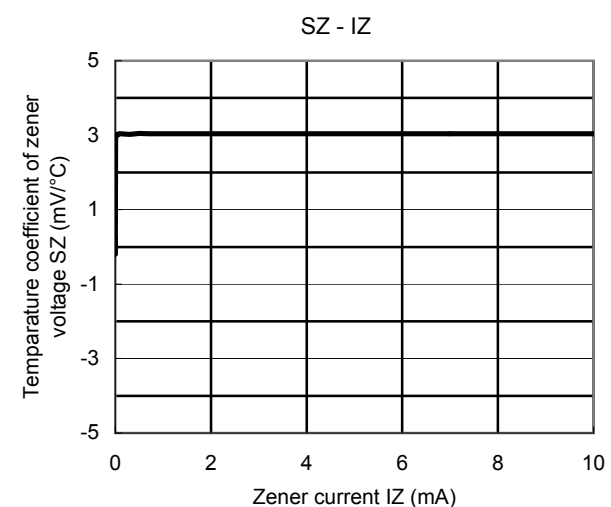
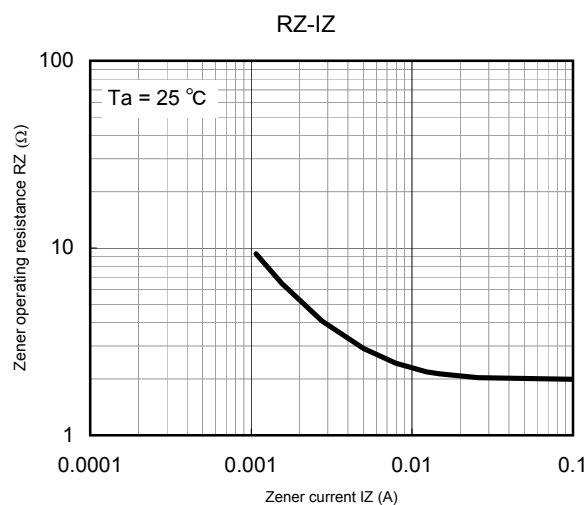
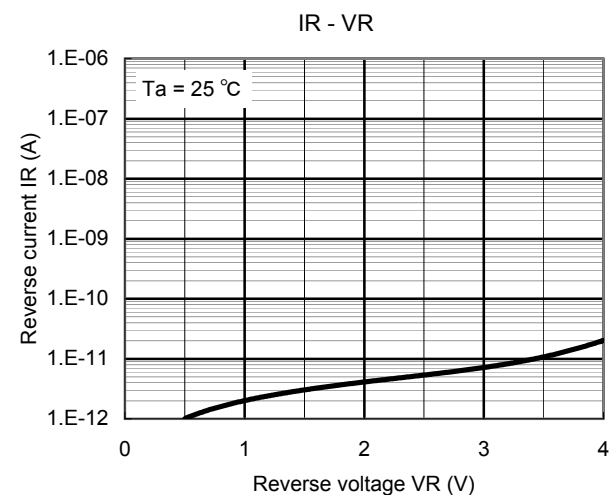
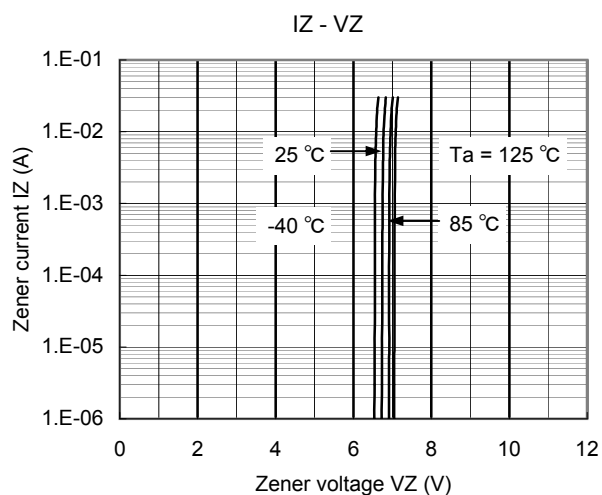
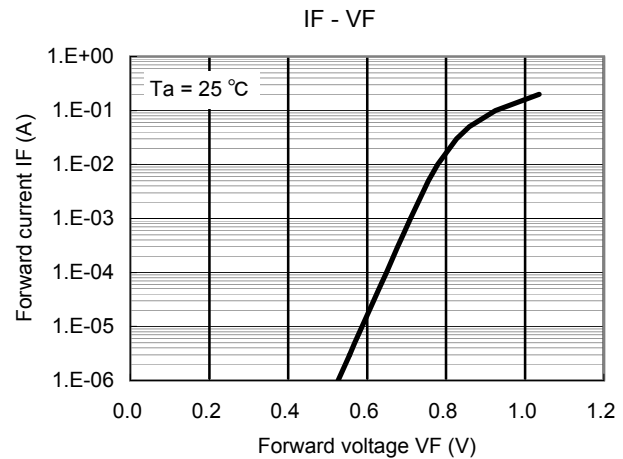
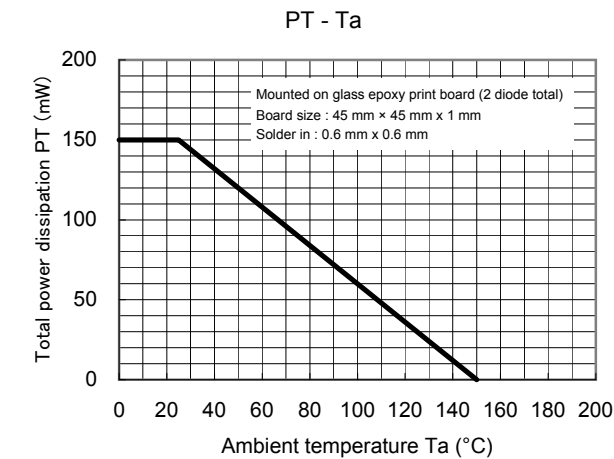
2. <sup>\*1</sup>: The temperature must be controlled 25°C for V<sub>Z</sub> measurement.

V<sub>Z</sub> value measured at other temperature must be adjusted to V<sub>Z</sub> (25°C)

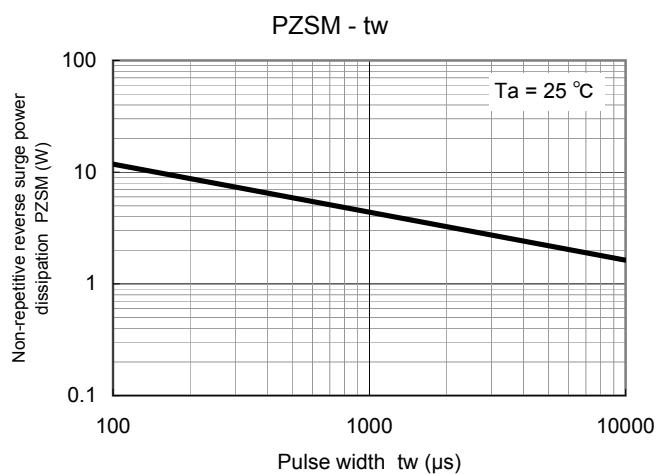
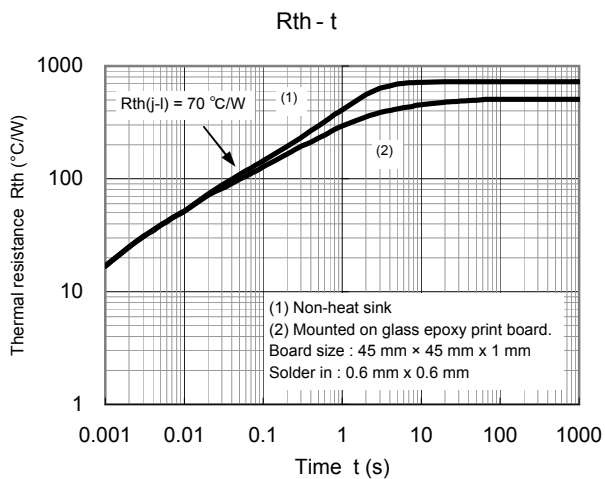
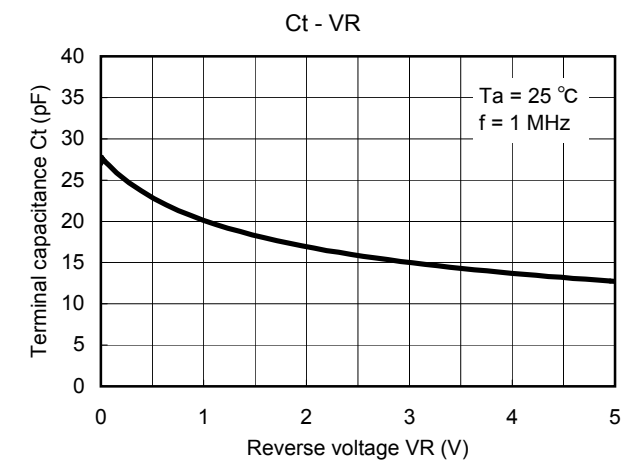
<sup>\*2</sup>: V<sub>Z</sub> guaranteed 20 ms after current flow.

<sup>\*3</sup>: T<sub>J</sub> = 25°C to 150°C

Technical Data ( reference )



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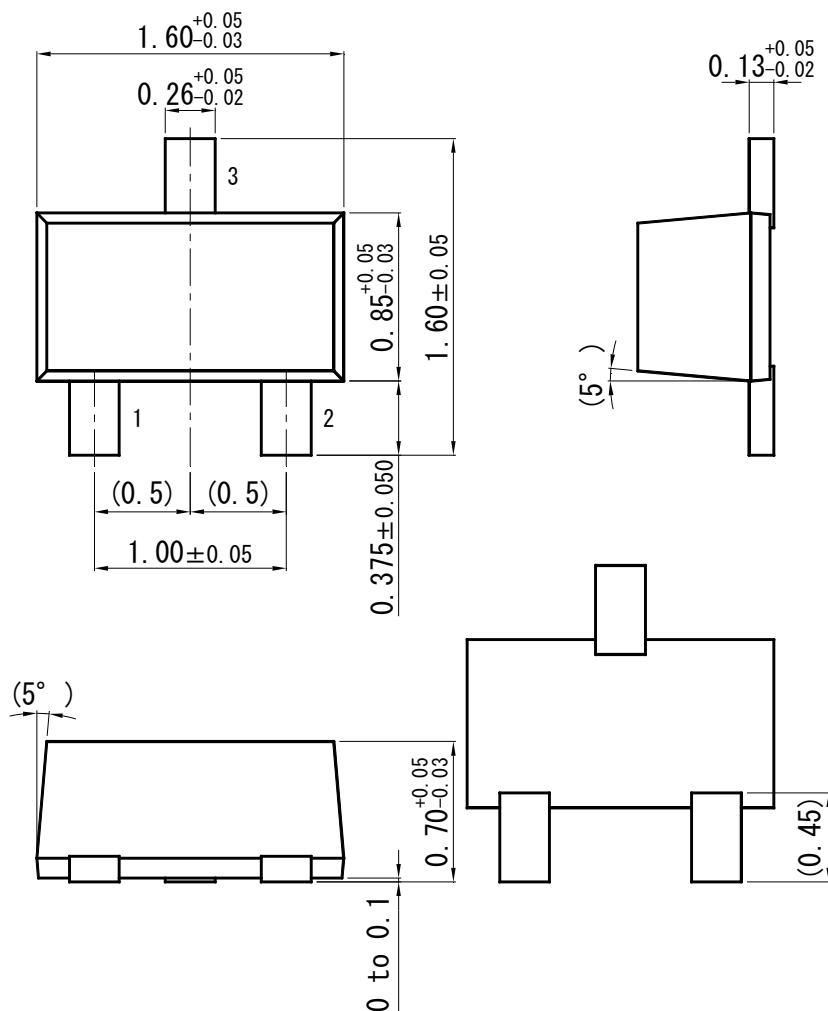


**Panasonic**

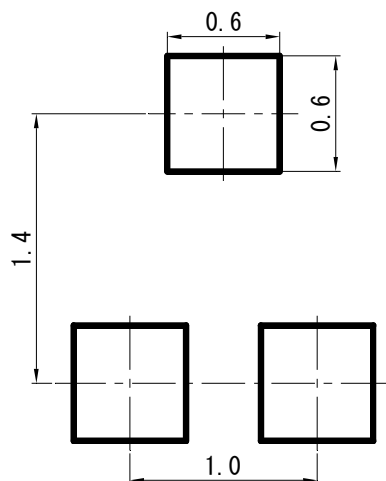
Zener Diode  
**DZ3S068D0L**

**SSMini3-F3-B**

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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