

# DZ2J068

## Silicon epitaxial planar type

For constant voltage / For surge absorption circuit

### ■ Features

- Excellent rising characteristics of zener current  $I_Z$
- Low zener operating resistance  $R_Z$
- Halogen-free / RoHS compliant  
(EU RoHS / UL-94 V-0 / MSL: Level 1 compliant)

### ■ Marking Symbol: GJ, GU

### ■ Packaging

DZ2J068×0L Embossed type (Thermo-compression sealing): 3 000 pcs / reel (standard)

### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

| Parameter                       | Symbol    | Rating      | Unit |
|---------------------------------|-----------|-------------|------|
| Repetitive peak forward current | $I_{FRM}$ | 200         | mA   |
| Total power dissipation *1      | $P_T$     | 200         | mW   |
| Electrostatic discharge *2      | ESD       | ±15         | kV   |
| Junction temperature            | $T_j$     | 150         | °C   |
| Storage temperature             | $T_{stg}$ | -55 to +150 | °C   |

Note) \*1: Mounted on glass epoxy print board. (45 mm × 45 mm × 1 mm)

Solder in (Recommended land pattern)

\*2: Test method: IEC61000-4-2 (C = 150 pF, R = 330 Ω, Contact discharge: 10 times)

### ■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

| Parameter                                   | Symbol   | Conditions             | Min  | Typ | Max  | Unit  |
|---|----------|------------------------|------|-----|------|-------|
| Forward voltage                             | $V_F$    | $I_F = 10 \text{ mA}$  |      |     | 1.0  | V     |
| Zener voltage *1,2,4                        | $V_Z$    | $I_Z = 5 \text{ mA}$   | 6.46 |     | 7.14 | V     |
| Zener operating resistance                  | $R_Z$    | $I_Z = 5 \text{ mA}$   |      |     | 20   | Ω     |
| Zener rise operating resistance             | $R_{ZK}$ | $I_Z = 0.5 \text{ mA}$ |      |     | 60   | Ω     |
| Reverse current                             | $I_R$    | $V_R = 4 \text{ V}$    |      |     | 0.1  | μA    |
| Temperature coefficient of zener voltage *3 | $S_Z$    | $I_Z = 5 \text{ mA}$   |      | 3.2 |      | mV/°C |

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

2. Absolute frequency of input and output is 5 MHz.

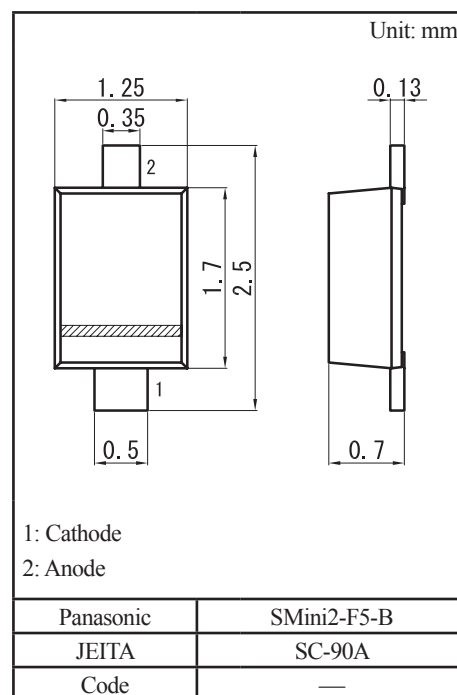
3. \*1: The temperature must be controlled 25°C for  $V_Z$  measurement.  $V_Z$  value measured at other temperature must be adjusted to  $V_Z$  (25°C)

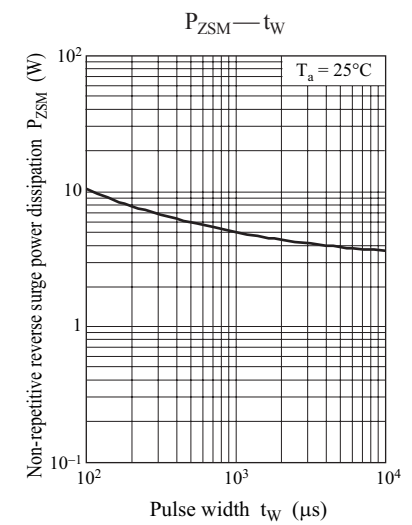
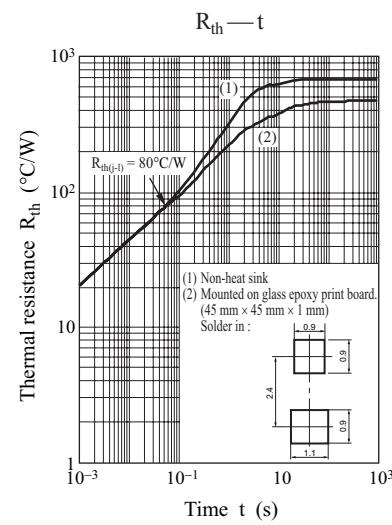
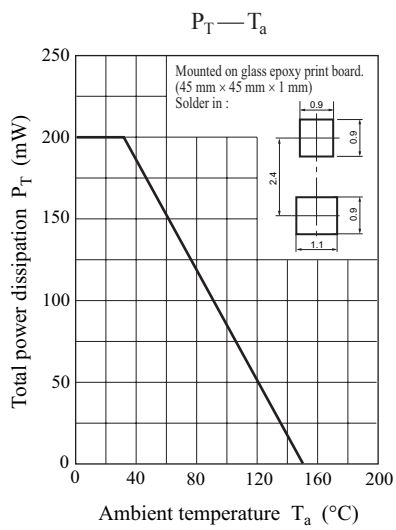
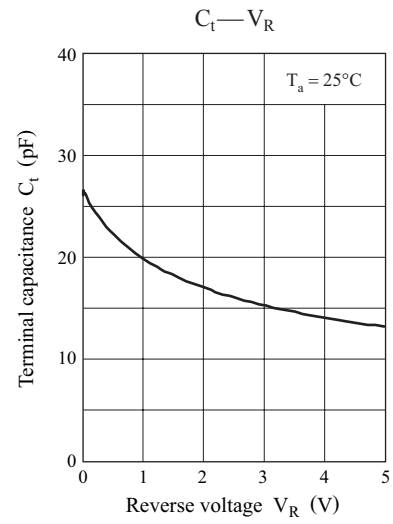
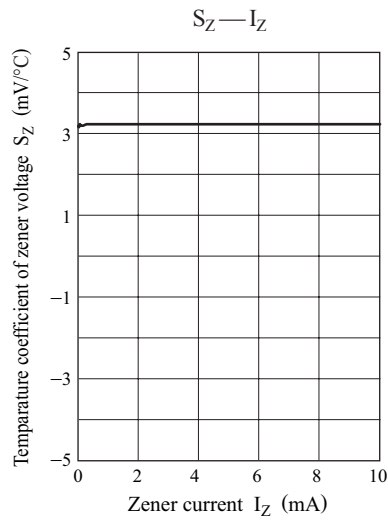
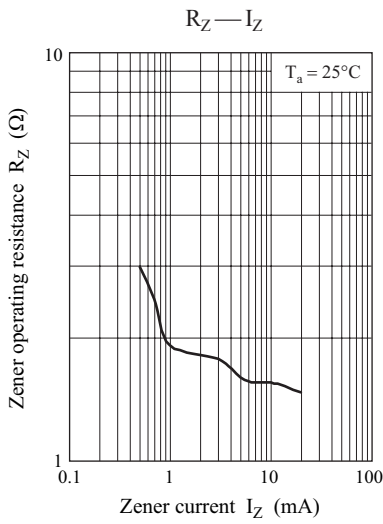
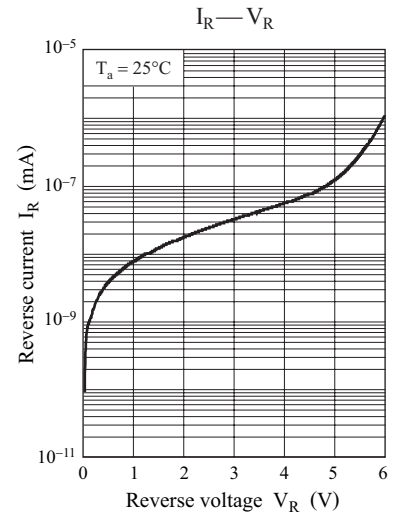
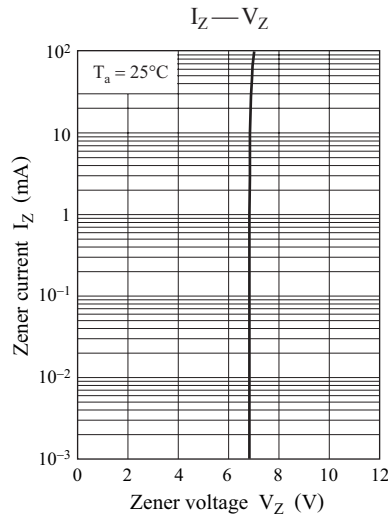
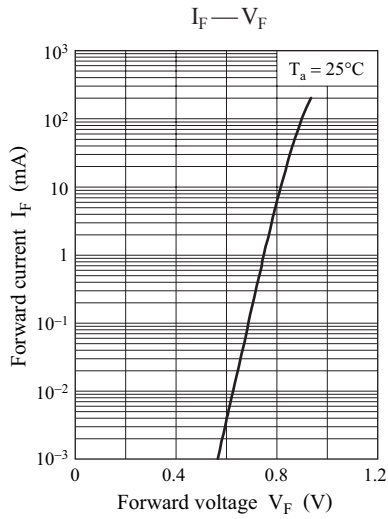
\*2:  $V_Z$  guaranteed 20 ms after current flow.

\*3:  $T_j = 25^\circ\text{C}$  to  $150^\circ\text{C}$

\*4: Rank classification

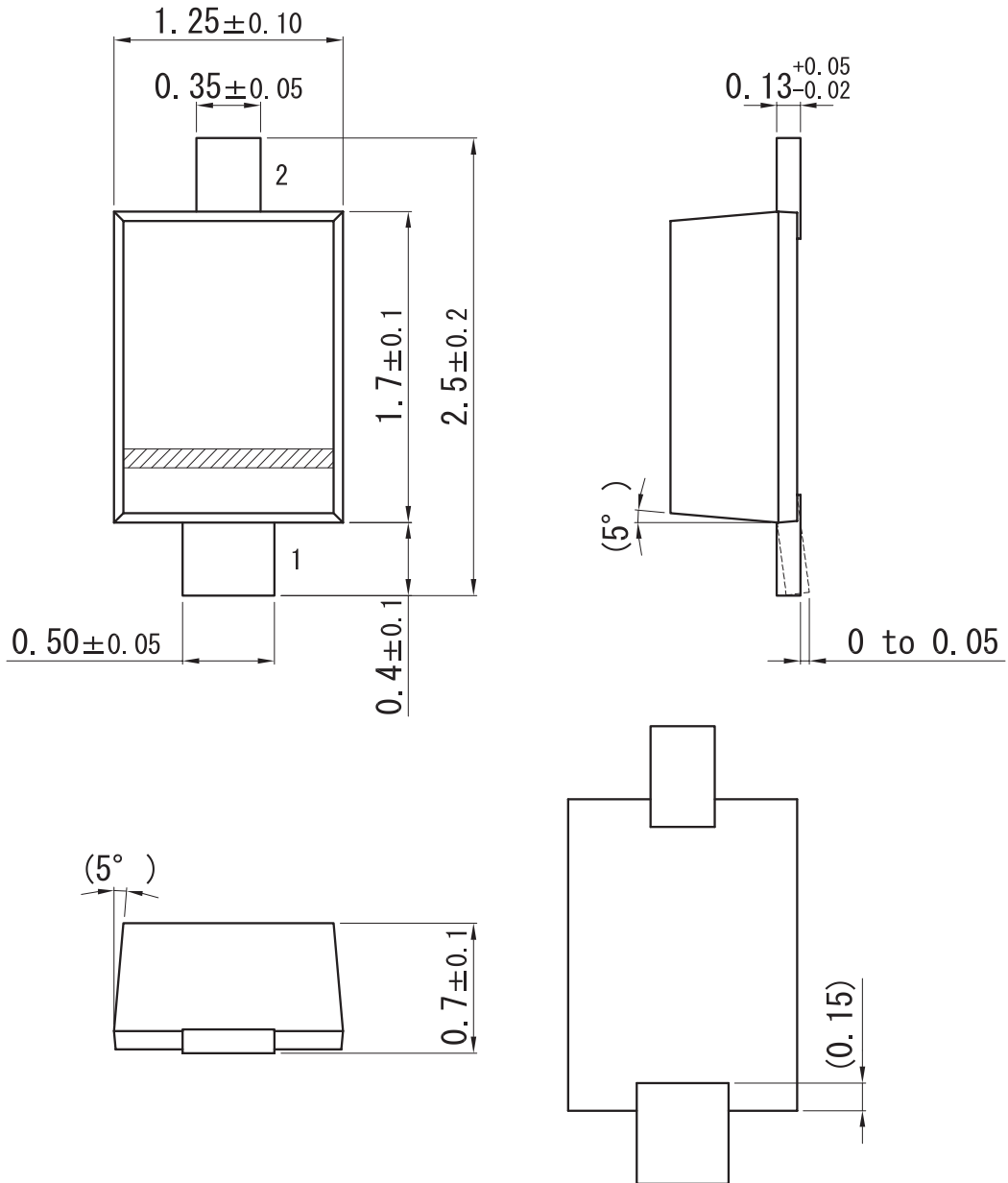
|                |              |              |
|----------------|--------------|--------------|
| Code           | M            | 0            |
| Rank           | M            | No-rank      |
| $V_Z$          | 6.64 to 6.98 | 6.46 to 7.14 |
| Marking Symbol | GU           | GJ           |



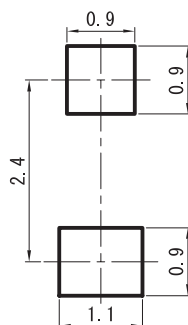


SMini2-F5-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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