

# DZ2U056

## Silicon epitaxial planar type

For constant voltage  
 For surge absorption circuit  
 DZ27056 in USSMini2 type package

### ■ 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: D

### ■ Packaging

DZ2U05600L Embossed type (Thermo-compression sealing): 10000 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      | $P_T$     | 120         | mW               |
| Electrostatic discharge *2      | ESD       | $\pm 15$    | kV               |
| Junction temperature            | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage temperature             | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

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

Solder in (Recommended land pattern)

\*2: Test method: IEC61000-4-2 (C = 150 pF, R = 330  $\Omega$ , 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                         | $V_Z$  | $I_Z = 5 \text{ mA}$  | 5.32 |     | 5.88 | V                    |
| Zener operating resistance                  | $R_Z$  | $I_Z = 5 \text{ mA}$  |      |     | 40   | $\Omega$             |
| Reverse current                             | $I_R$  | $V_R = 2.5 \text{ V}$ |      |     | 0.5  | $\mu\text{A}$        |
| Temperature coefficient of zener voltage *3 | $S_Z$  | $I_Z = 5 \text{ mA}$  |      | 1.6 |      | mV/ $^\circ\text{C}$ |

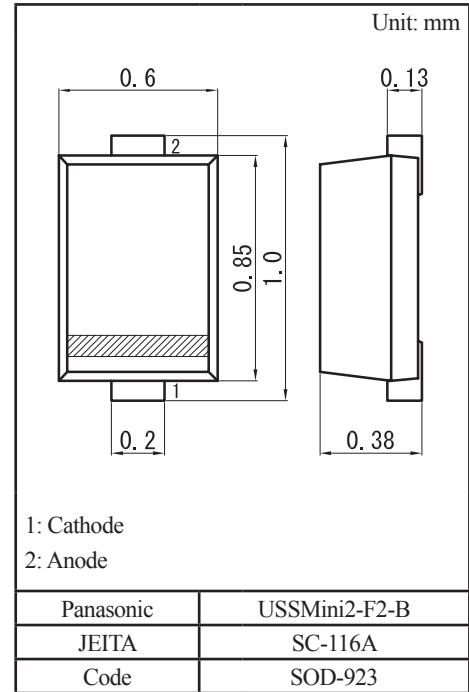
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

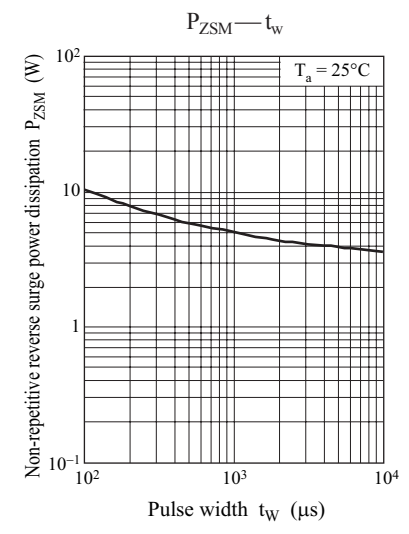
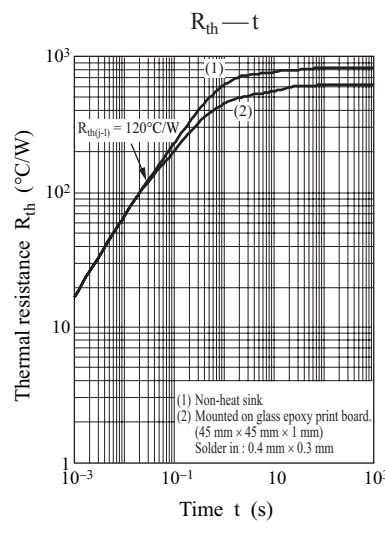
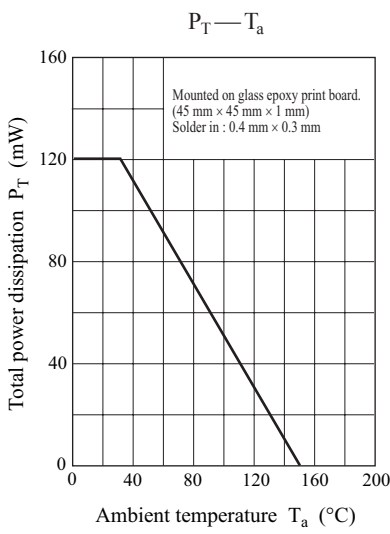
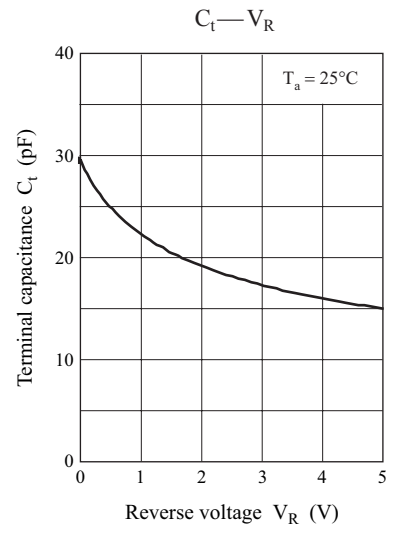
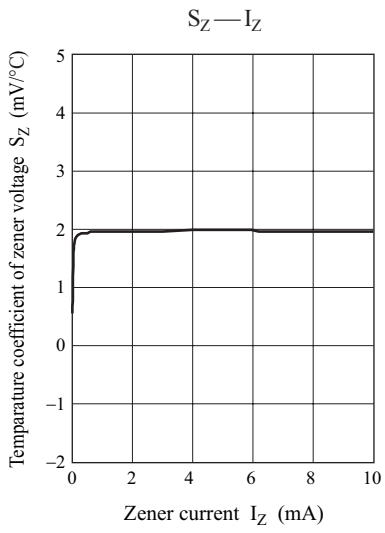
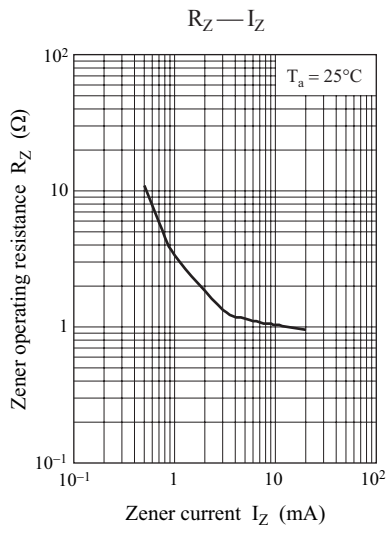
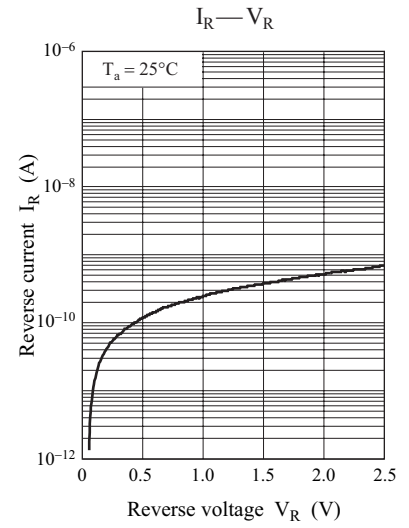
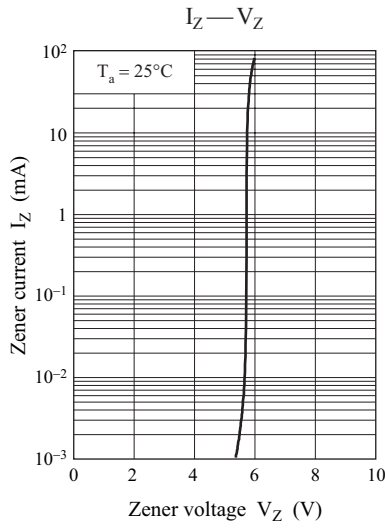
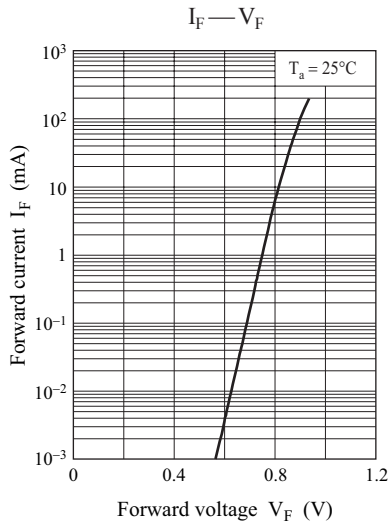
2. Absolute frequency of input and output is 5 MHz.

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

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

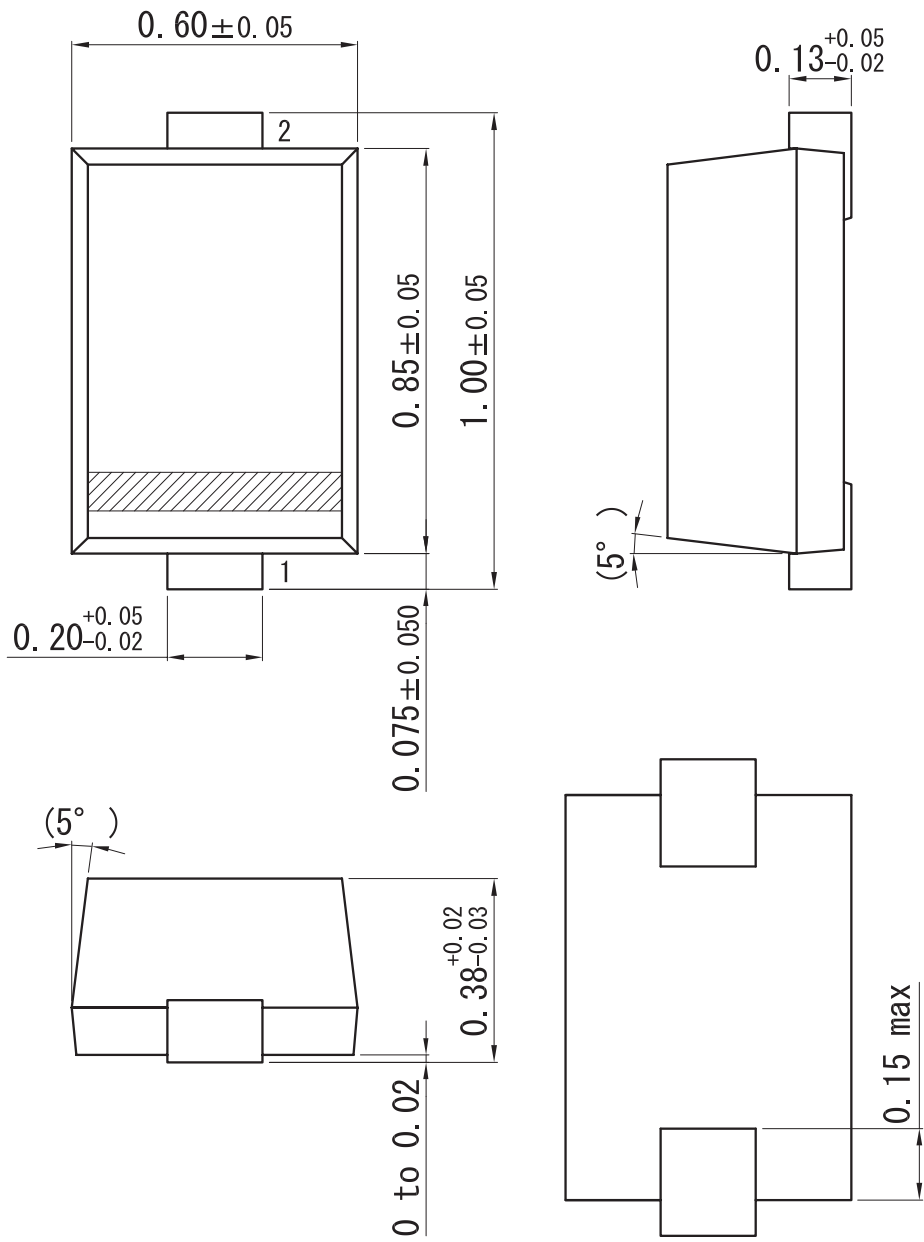
\*3:  $T_j = 25^\circ\text{C}$  to 150 $^\circ\text{C}$



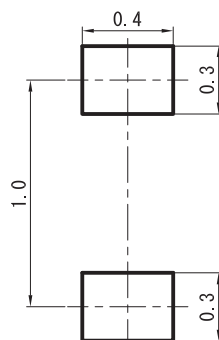


USSMini2-F2-B

Unit: mm



■ Land Pattern (Reference) (Unit: mm)



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