

# DZ2U300

## Silicon epitaxial planar type

For constant voltage / waveform clipper and surge absorption circuit

Low noise type

DZ27300 in USSMini2 type package

### ■ Features

- Excellent rising characteristics of zener current  $I_Z$
- Low zener operating resistance  $R_Z$
- Contributes to miniaturization of sets, reduction of component count.
- Eco-friendly Halogen-free package

### ■ Packaging

Embossed type (Thermo-compression sealing): 10000 pcs / reel (standard)

### ■ Package

- Code  
USSMini2-F2-B
- Pin Name
  1. Cathode
  2. Anode

### ■ Marking Symbol: 1F

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

| Parameter                       | Symbol    | Rating      | Unit             |
|---------------------------------|-----------|-------------|------------------|
| Repetitive peak forward current | $I_{FRM}$ | 200         | mA               |
| Total power dissipation *       | $P_T$     | 120         | mW               |
| Junction temperature            | $T_j$     | 150         | $^\circ\text{C}$ |
| Storage temperature             | $T_{stg}$ | -55 to +150 | $^\circ\text{C}$ |

Note) \*:  $P_T = 120$  mW achieved with a printed circuit board.

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

| Parameter                                   | Symbol | Conditions    | Min   | Typ  | Max   | Unit                 |
|---------------------------------------------|--------|---------------|-------|------|-------|----------------------|
| Forward voltage                             | $V_F$  | $I_F = 10$ mA |       |      | 1.0   | V                    |
| Zener voltage *1, 2                         | $V_Z$  | $I_Z = 2$ mA  | 28.50 |      | 31.50 | V                    |
| Zener operating resistance                  | $R_Z$  | $I_Z = 2$ mA  |       |      | 160   | $\Omega$             |
| Reverse current                             | $I_R$  | $V_R = 23$ V  |       |      | 0.05  | $\mu\text{A}$        |
| Temperature coefficient of zener voltage *3 | $S_Z$  | $I_Z = 2$ mA  |       | 28.7 |       | mV/ $^\circ\text{C}$ |

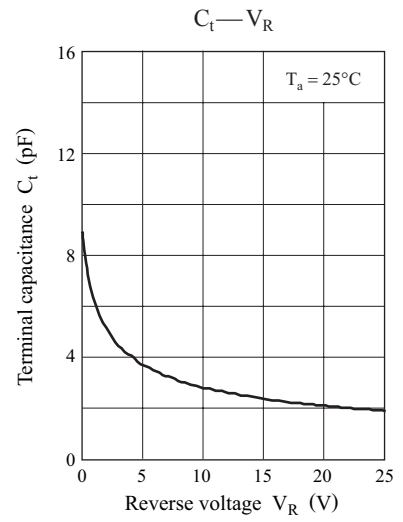
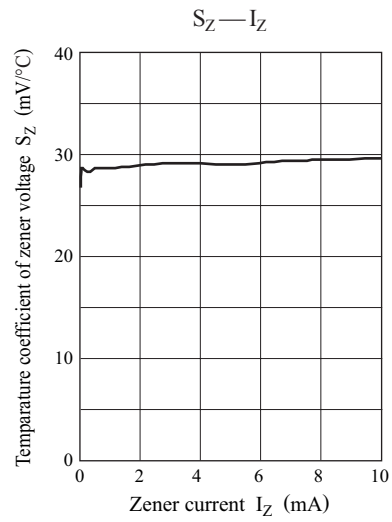
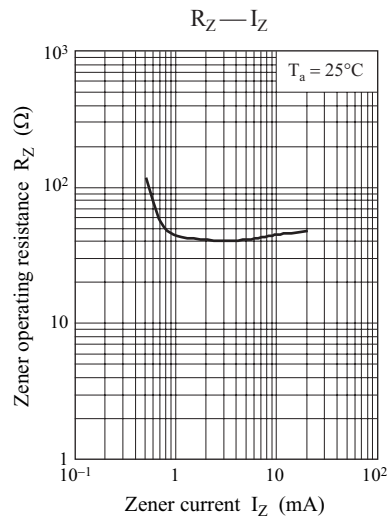
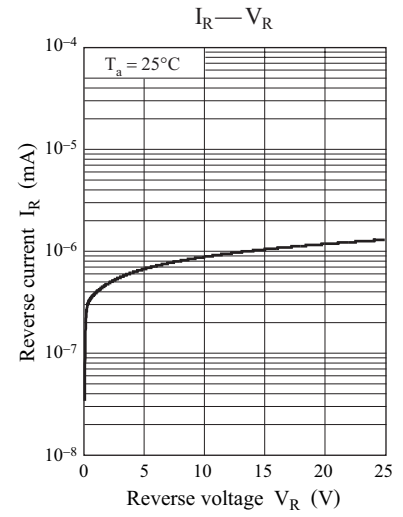
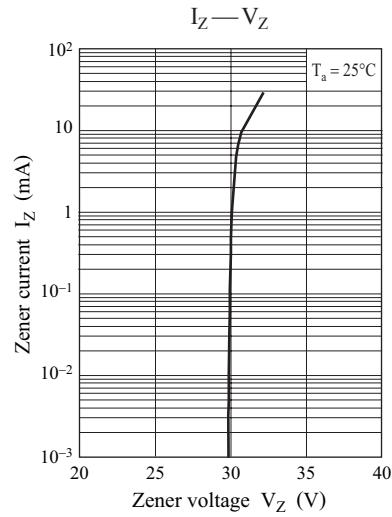
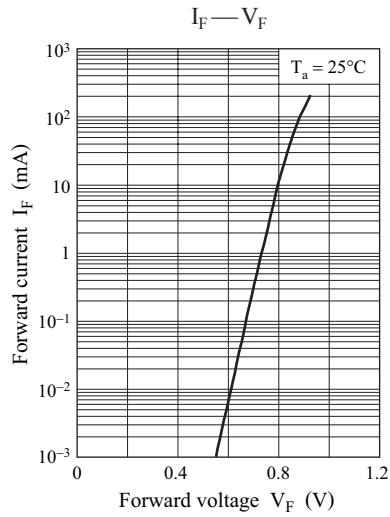
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring methods for diodes.

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  $V_Z (25^\circ\text{C})$

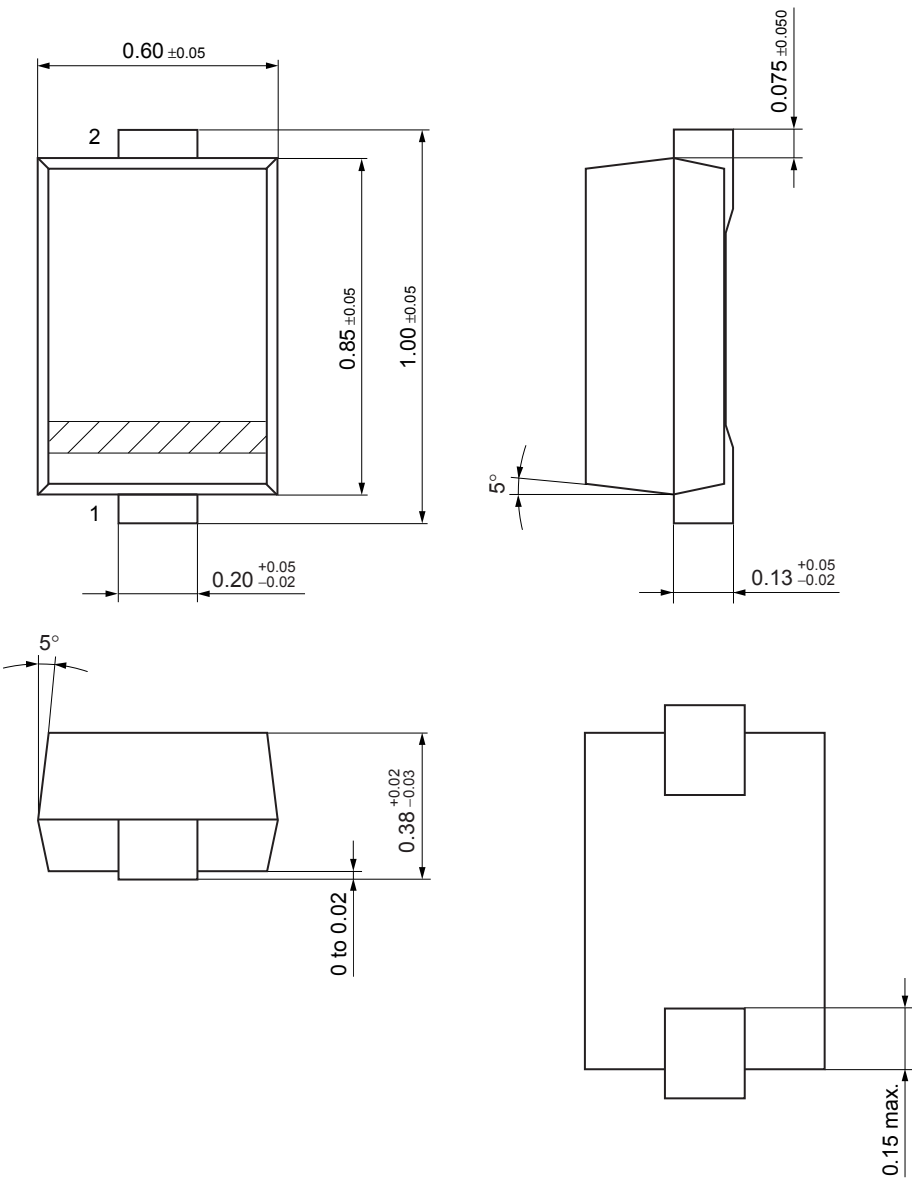
\*2:  $V_Z$  guaranteed 20 ms after current flow.

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



USSMini2-F2-B

Unit: mm



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