

DZ2J051

Silicon epitaxial planar type

For constant voltage / waveform clipper and surge absorption circuit

Low noise type

■ 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): 3000 pcs / reel (standard)

■ Package

- Code
SMini2-F5-B
- Pin Name
1. Cathode
2. Anode

■ Marking Symbol: CJ, CU

■ 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 | 200 | mW |
| Junction temperature | T_j | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -55 to +150 | $^\circ\text{C}$ |

Note) *: $P_T = 200$ 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 *1,2,4 | V_Z | $I_Z = 5$ mA | 4.85 | | 5.36 | V |
| Zener operating resistance | R_Z | $I_Z = 5$ mA | | | 60 | Ω |
| Zener rise operating resistance | R_{ZK} | $I_Z = 1.0$ mA | | | 500 | Ω |
| Reverse current | I_R | $V_R = 2.0$ V | | | 1.0 | μA |
| Temperature coefficient of zener voltage *3 | S_Z | $I_Z = 5$ mA | | 0.7 | | 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.

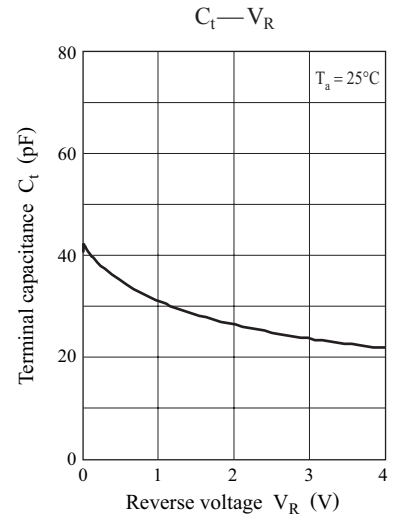
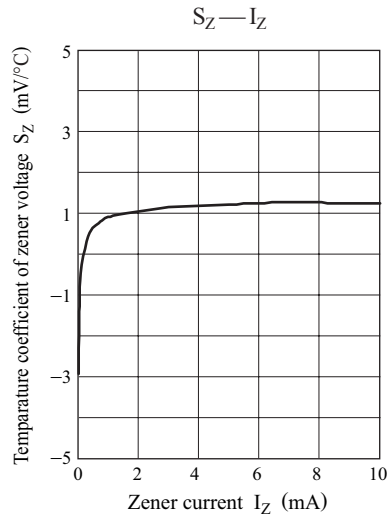
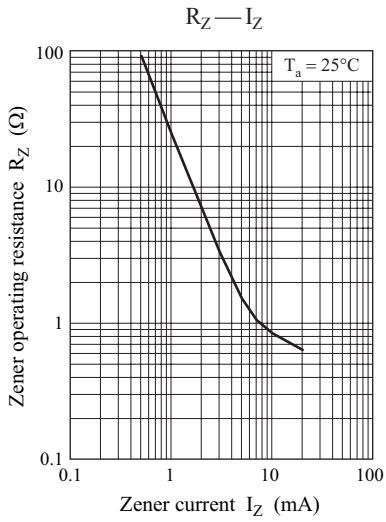
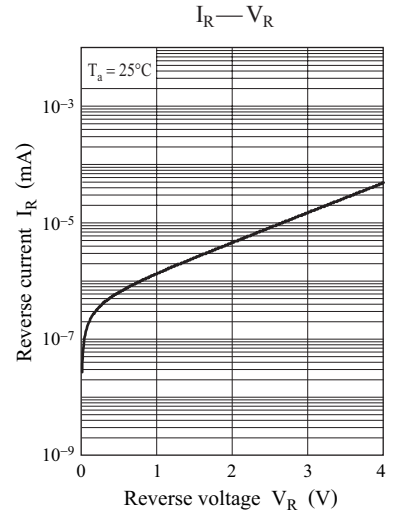
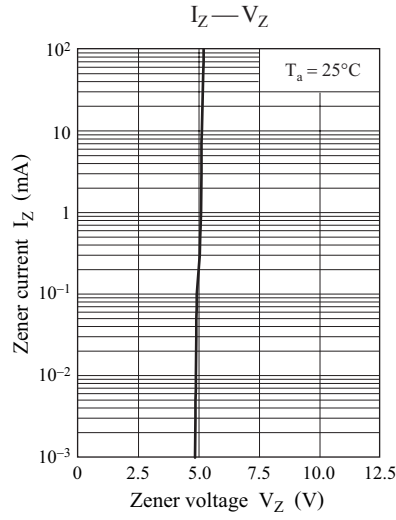
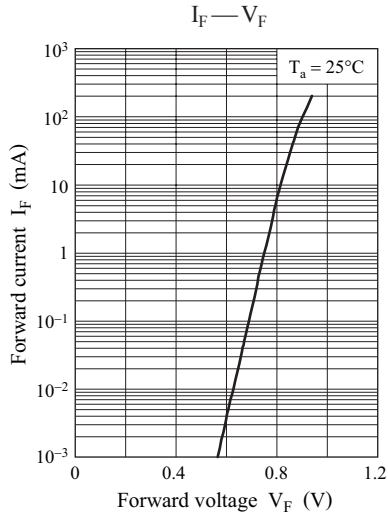
3. *1: The temperature must be controlled 25°C for V_Z measurement. V_Z value measured at other temperature must be adjusted to $V_Z (25^\circ\text{C})$

*2: V_Z guaranteed 20 ms after current flow.

*3: $T_j = 25^\circ\text{C}$ to 150°C

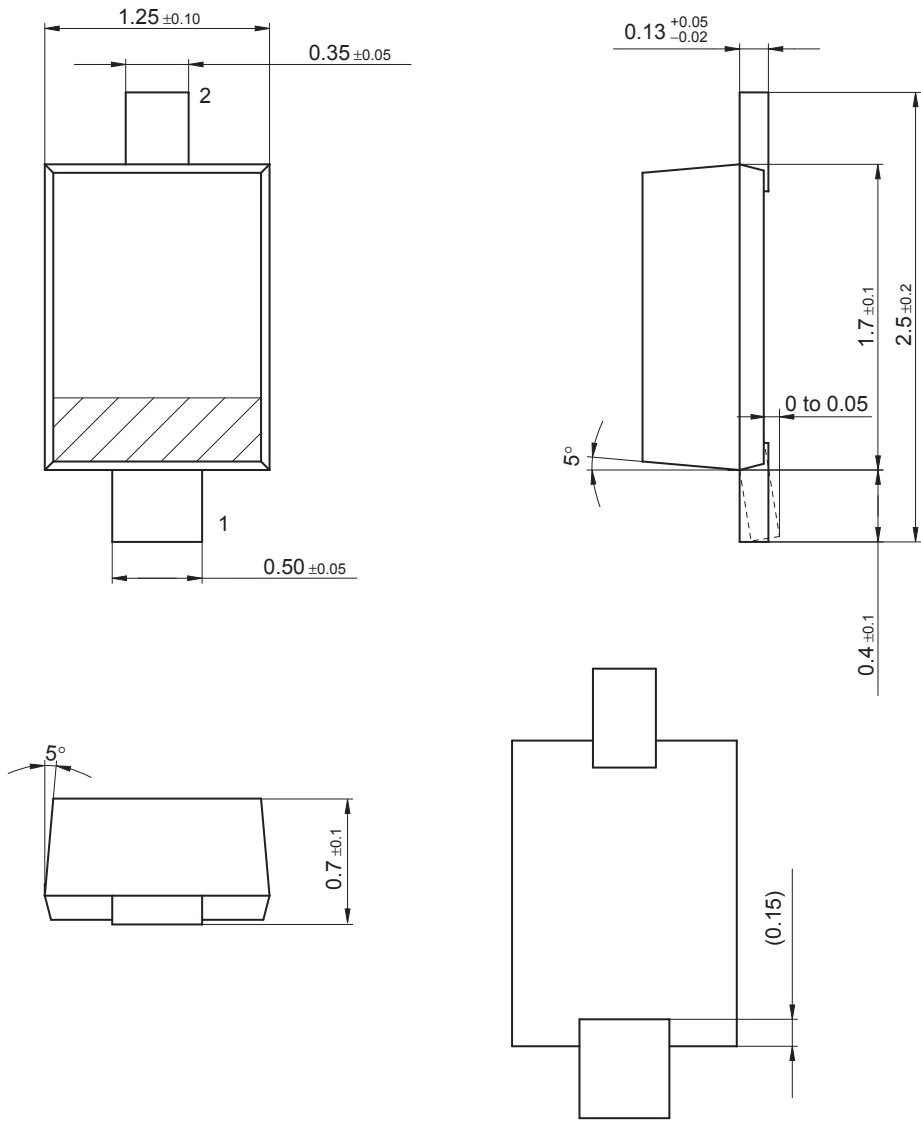
*4: Rank classification

| | | |
|----------------|--------------|--------------|
| Code | M | 0 |
| Rank | M | No-rank |
| V_Z | 5.00 to 5.26 | 4.85 to 5.36 |
| Marking Symbol | CU | CJ |



SMini2-F5-B

Unit: mm



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