

Zener diode

UDZS Series

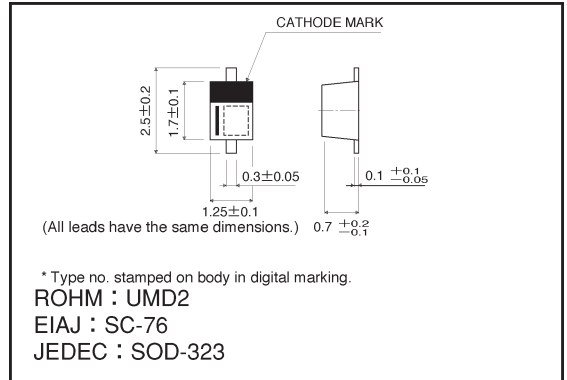
●Application

Constant voltage control

●Features

- 1) Extremely compact, 2-pin mini-mold type for high-density mounting. (UMD2-SOD-323)
- 2) Non-wire bonding structure improves.
- 3) High demand voltage range (5.1V-10V) is manufactured on high-efficient non-write bonding production line.

●External dimensions (Units: mm)



●Construction

Silicon epitaxial planar

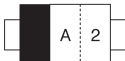
●Absolute maximum ratings (Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|-----------------------|--------|----------|------|
| Power dissipation | P | 200 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -55~+150 | °C |
| Operating temperature | Topr | -55~+150 | °C |

●Markings (TYPE No.)

| Product name | Type No. | | Product name | Type No. | |
|--------------|----------|---|--------------|----------|---|
| UDZS 5.1B | A | 2 | UDZS 7.5B | H | 2 |
| UDZS 5.6B | C | 2 | UDZS 8.2B | J | 2 |
| UDZS 6.2B | E | 2 | UDZS 9.1B | L | 2 |
| UDZS 6.8B | F | 2 | UDZS 10B | 0 | 5 |

(Ex.) UDZS 5.1B



●Electrical characteristics (Ta = 25°C)

| Type | Zener voltage | | | Operating resistance | | Rising operating resistance | | Reverse current | |
|-----------|---------------|--------|---------|----------------------|---------|-----------------------------|---------|-----------------|--------|
| | Vz (V) | | | Zz (Ω) | | Zzk (Ω) | | IR (μA) | |
| | Min. | Max. | Iz (mA) | Max. | Iz (mA) | Max. | Iz (mA) | Max. | VR (V) |
| UDZS 5.1B | 4.980 | 5.200 | 5 | 80 | 5 | 500 | 0.5 | 2 | 1.5 |
| UDZS 5.6B | 5.490 | 5.730 | 5 | 60 | 5 | 200 | 0.5 | 1 | 2.5 |
| UDZS 6.2B | 6.060 | 6.330 | 5 | 60 | 5 | 100 | 0.5 | 1.0 | 3.0 |
| UDZS 6.8B | 6.650 | 6.930 | 5 | 40 | 5 | 60 | 0.5 | 0.5 | 3.5 |
| UDZS 7.5B | 7.280 | 7.600 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 4.0 |
| UDZS 8.2B | 8.020 | 8.360 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 5.0 |
| UDZS 9.1B | 8.850 | 9.230 | 5 | 30 | 5 | 60 | 0.5 | 0.5 | 6.0 |
| UDZS 10B | 9.770 | 10.210 | 5 | 30 | 5 | 60 | 0.5 | 0.1 | 7.0 |

Notes) 1. The Zener voltage (Vz) is measured 40ms after power is supplied.

2. The operating resistances (Zz, Zzk) are measured by superimposing a minute alternating current on the regulated current (Iz).

●Electrical characteristic curves (Ta = 25°C unless specified otherwise)

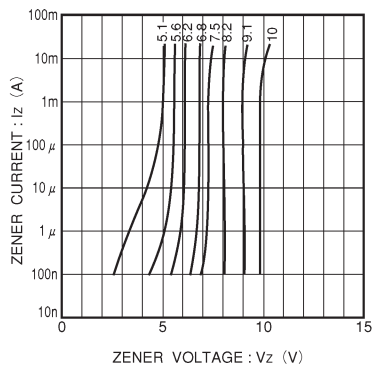


Fig. 1 Zener characteristics

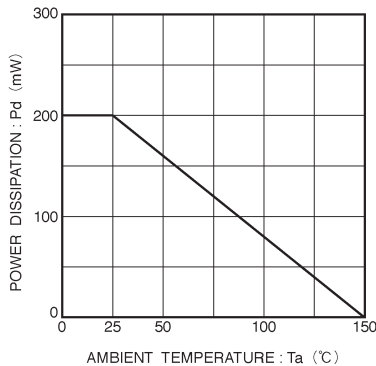


Fig. 2 Derating curve