

# Zener diode

## UMZ12N

### ●Application

Voltage regulation

(Anode common twin type)

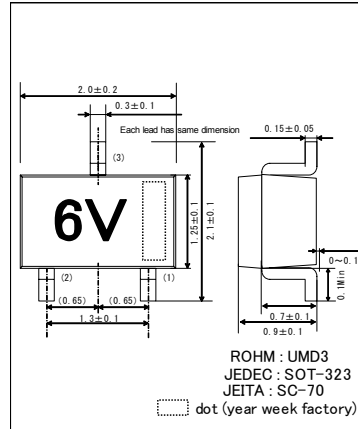
### ●Features

- 1) Small mold type. (UMD3)
- 2) High reliability.

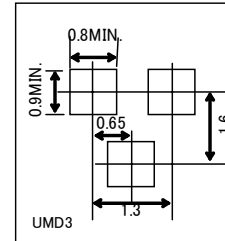
### ●Structure

Silicon epitaxial planar

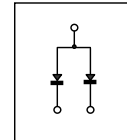
### ●External dimensions (Unit : mm)



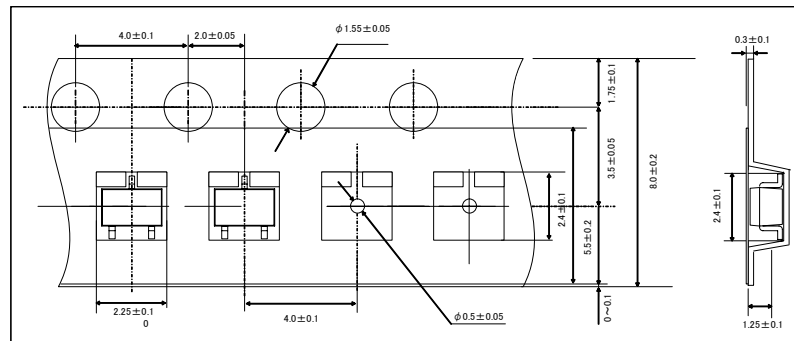
### ●Lead size figure (Unit : mm)



### ●Structure



### ●Taping dimensions (Unit : mm)



### ●Absolute maximum ratings (Ta=25°C)

| Parameter              | Symbol | Limits      | Unit |
|------------------------|--------|-------------|------|
| Power dissipation (*1) | P      | 200         | mW   |
| Junction temperature   | Tj     | 150         | °C   |
| Storage temperature    | Tstg   | -55 to +150 | °C   |

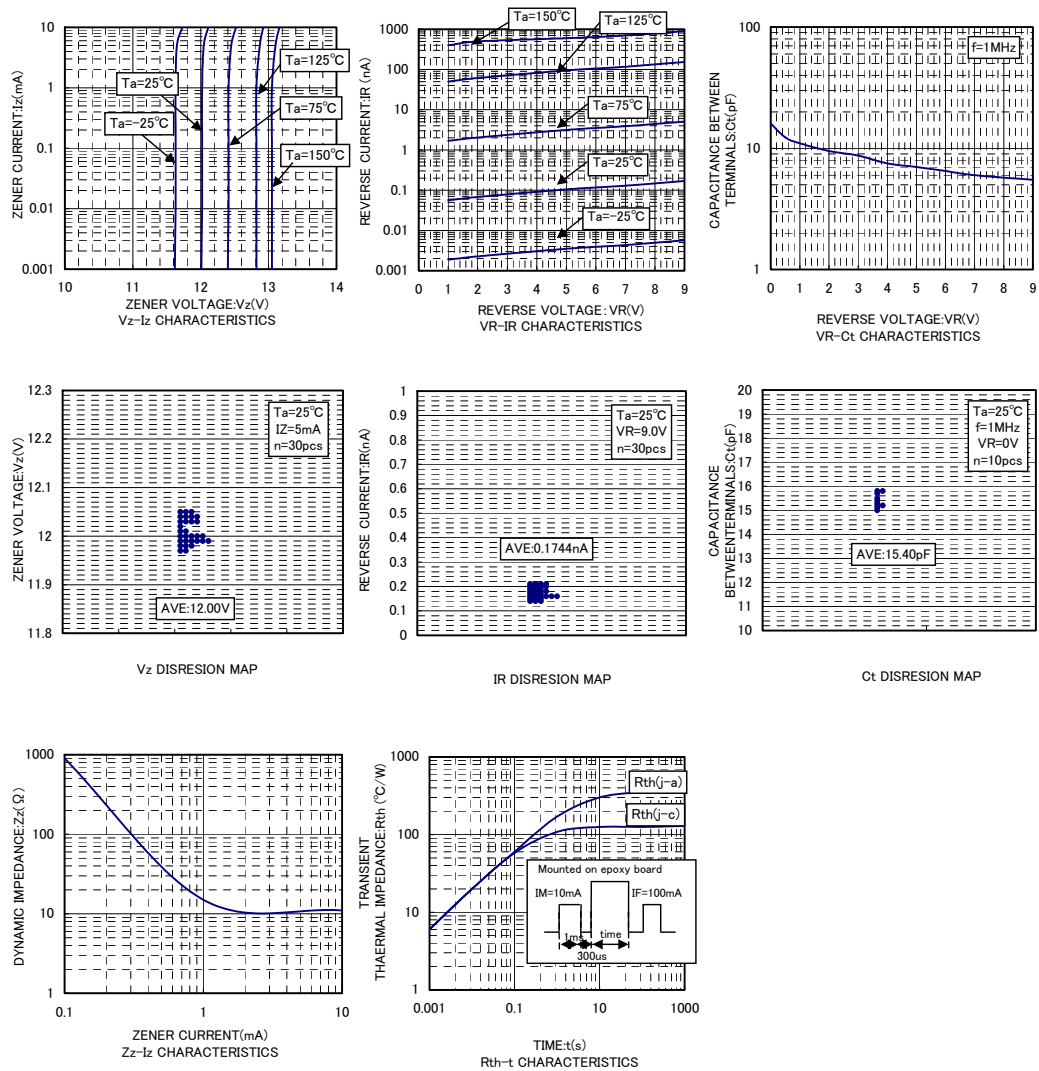
(\*1)Total of 2 elements

### ●Electrical characteristics (Ta=25°C)

| Parameter                    | Symbol          | Min. | Typ. | Max. | Unit | Conditions            |
|------------------------------|-----------------|------|------|------|------|-----------------------|
| Zener voltage                | V <sub>Z</sub>  | 11.0 | -    | 13.0 | V    | I <sub>Z</sub> =5mA   |
| Reverse current              | I <sub>R</sub>  | -    | -    | 0.10 | μA   | V <sub>R</sub> =9V    |
| Forward operating resistance | Z <sub>Z</sub>  | -    | -    | 30   | Ω    | I <sub>Z</sub> =5mA   |
| Rising operating resistance  | Z <sub>Zk</sub> | -    | -    | 80   | Ω    | I <sub>Z</sub> =0.5mA |

## Diodes

## ●Electrical characteristic curves (Ta=25°C)



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