

# Bi direction ESD Protection Diode

## RSB16X3N

●Applications

ESD Protection

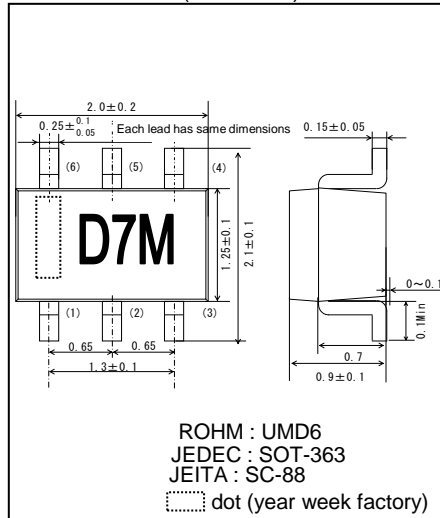
●Features

- 1) Small mold type. (UMD6)
- 2) High reliability.
- 3) Bi direction.

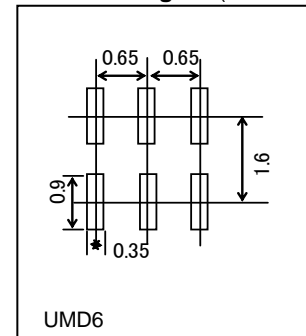
●Construction

Silicon epitaxial planer

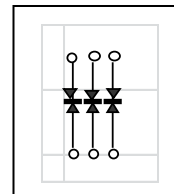
●Dimensions (Unit : mm)



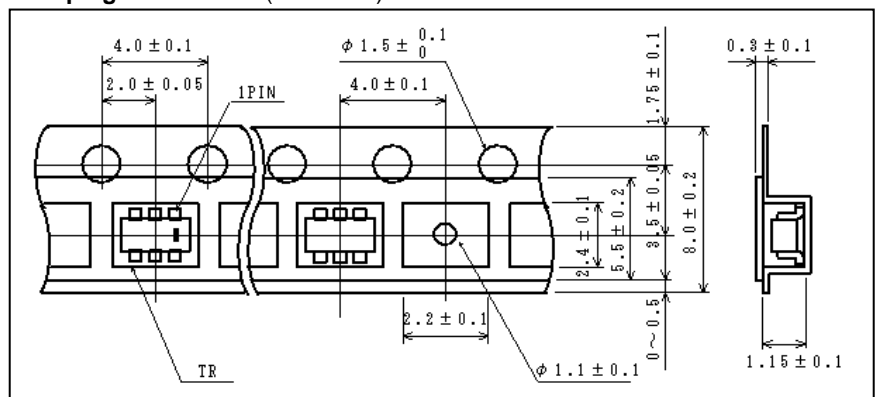
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

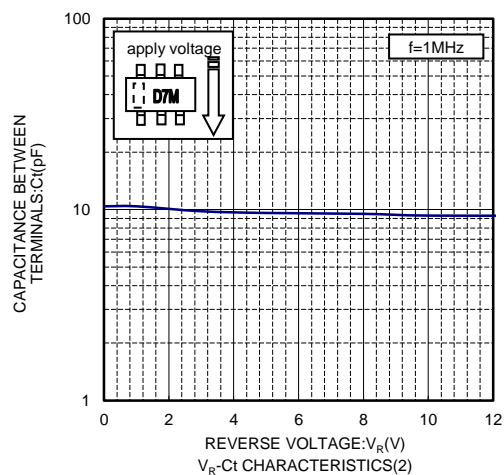
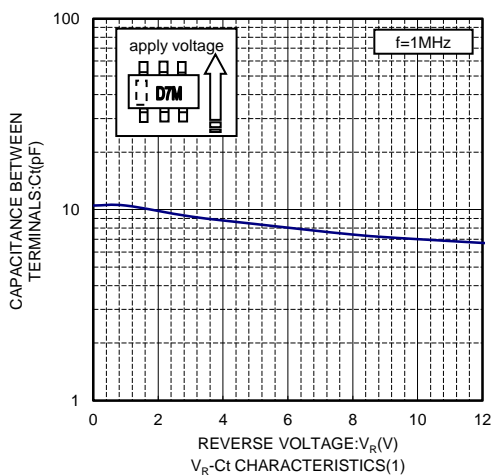
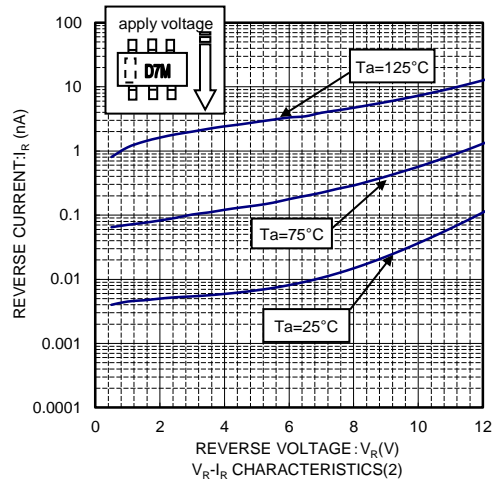
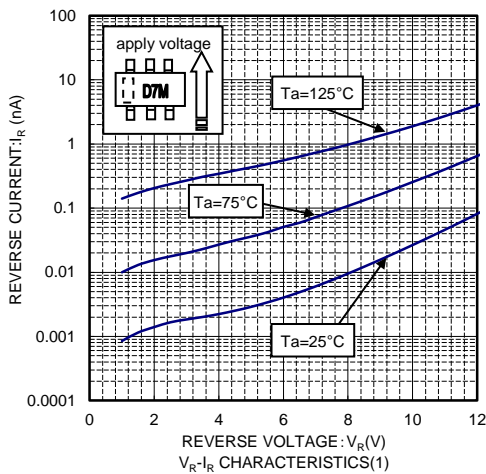
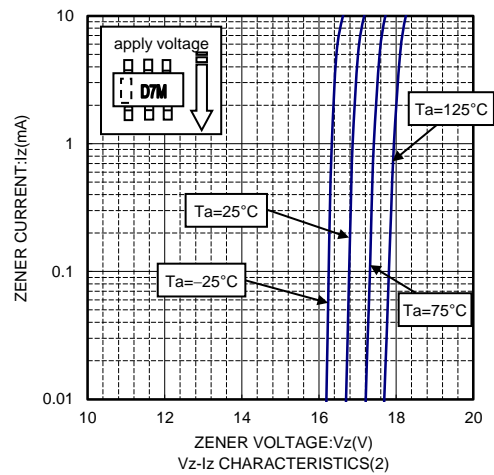
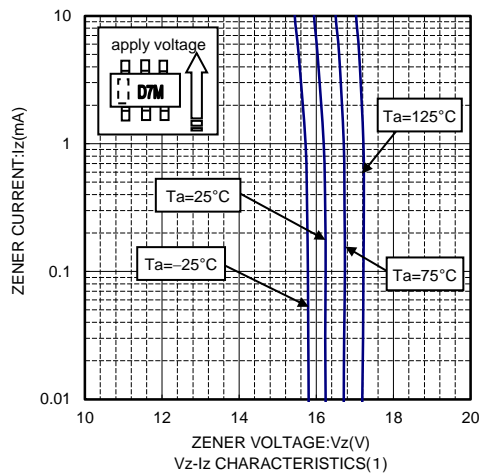
| Parameter             | Symbol | Limits      | Unit |
|-----------------------|--------|-------------|------|
| Power dissipation (*) | Pd     | 200         | mW   |
| Junction temperature  | Tj     | 150         | °C   |
| Storage temperature   | Tstg   | -55 to +150 | °C   |

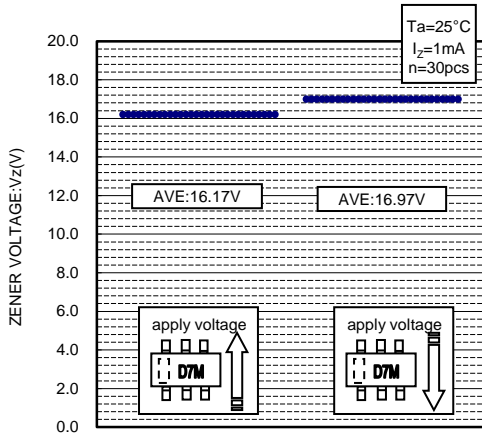
(\*) Total three elements

●Electrical characteristics (Ta=25°C)

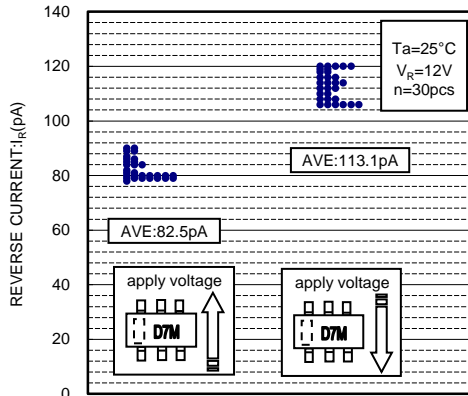
| Parameter            | Symbol | Min. | Typ. | Max. | Unit | Conditions    |
|----------------------|--------|------|------|------|------|---------------|
| Zener voltage        | Vz     | 14.4 | -    | 17.6 | V    | Iz=1mA        |
| Reverse current      | IR     | -    | -    | 0.1  | μA   | VR=12V        |
| Junction capacitance | Ct     | -    | -    | 30   | pF   | VR=0V, f=1MHz |

\*Zener voltage (Vz) shall be measured at 40ms after loading current. Rating of per diode.

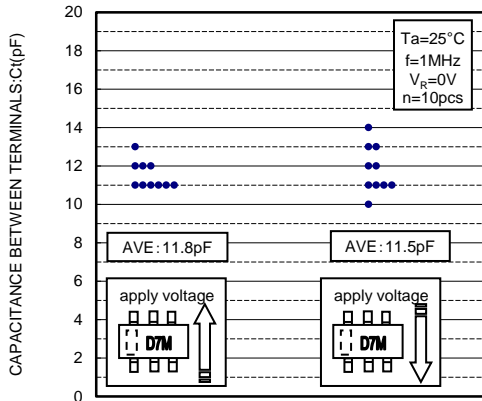




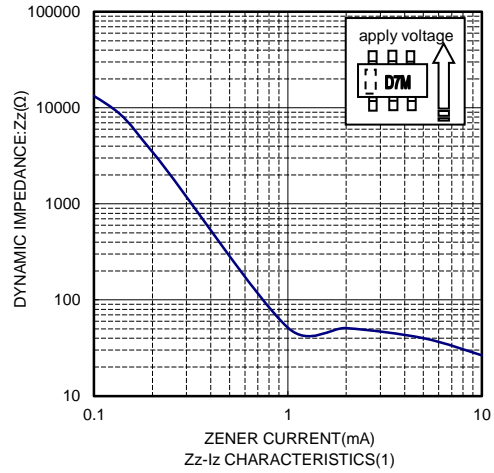
Vz DISPERSION MAP



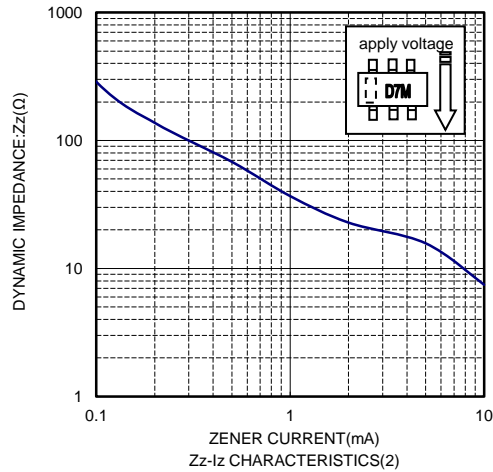
Ir DISPERSION MAP



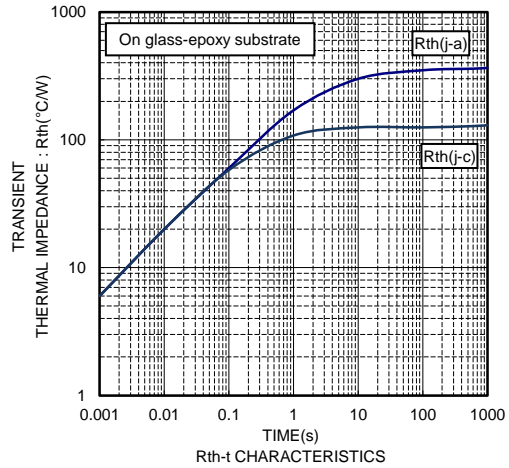
Ct DISPERSION MAP



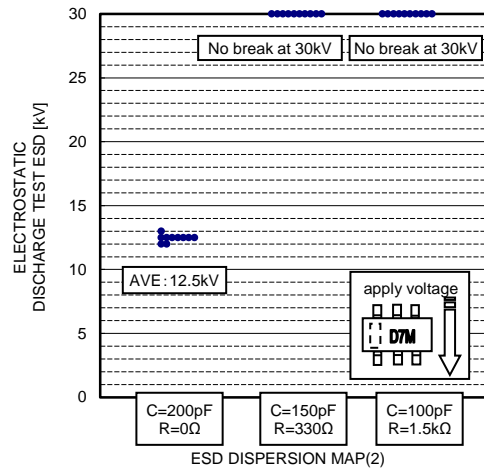
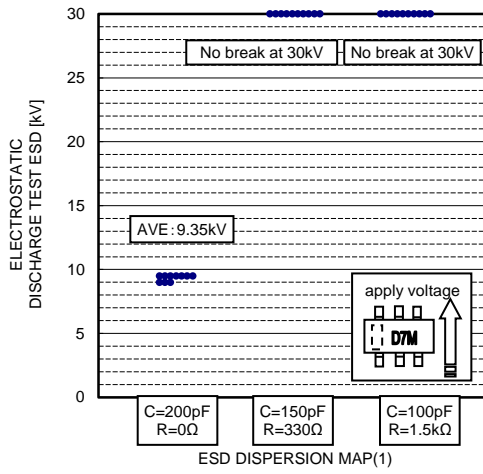
Zz-Iz CHARACTERISTICS(1)



Zz-Iz CHARACTERISTICS(2)



Rth-t CHARACTERISTICS



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