

# Switching Diode

## UMN1N

●Applications

Ultra high speed switching

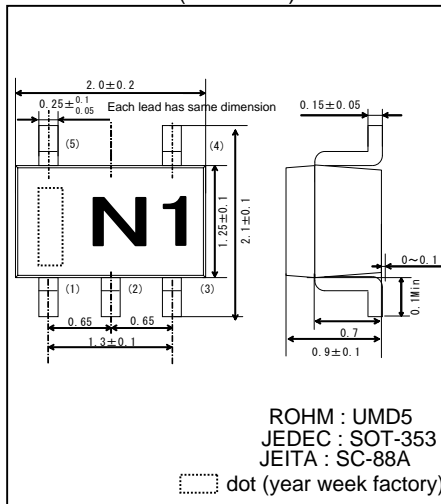
●Features

- 1) Small mold type. (UMD5)
- 2) High reliability.

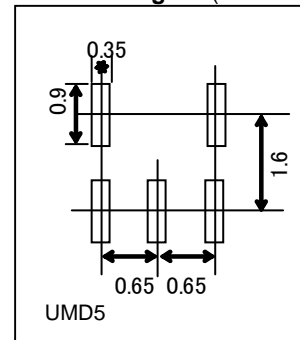
●Construction

Silicon epitaxial planar

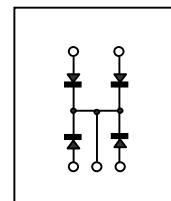
●Dimensions (Unit : mm)



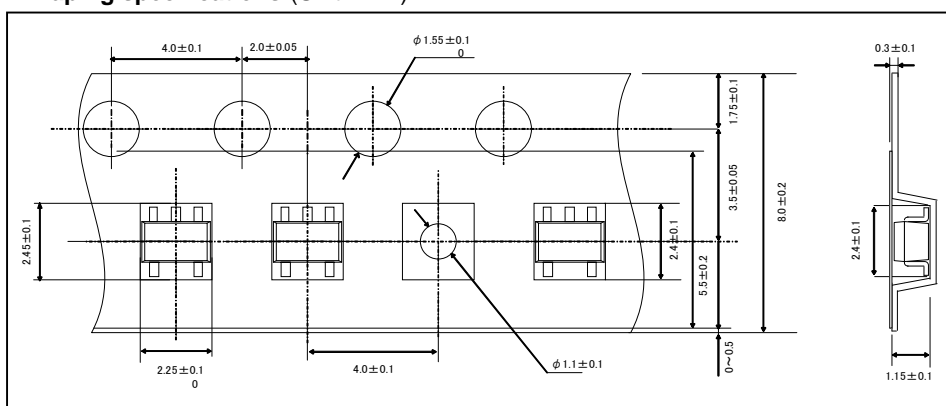
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

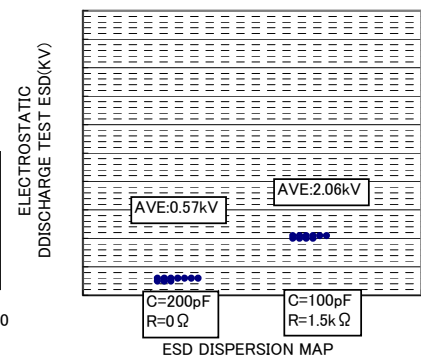
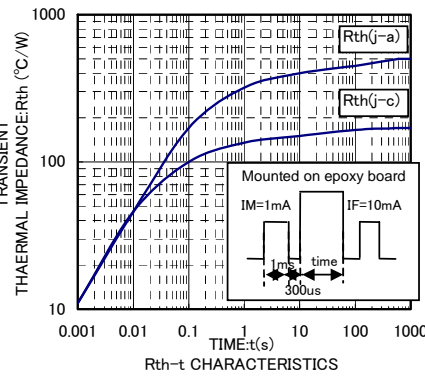
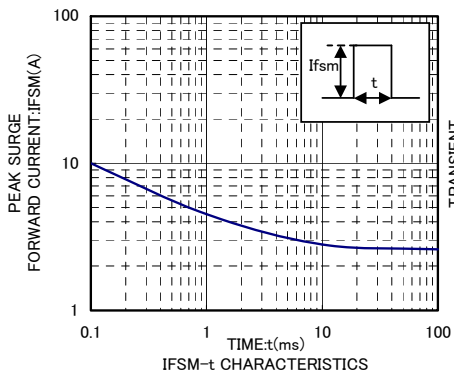
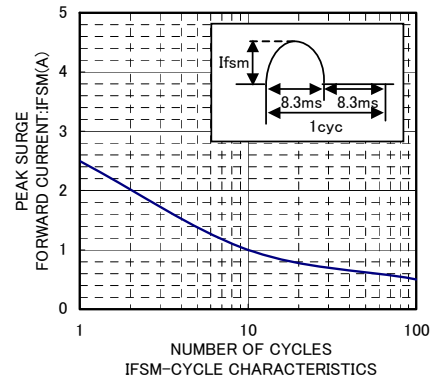
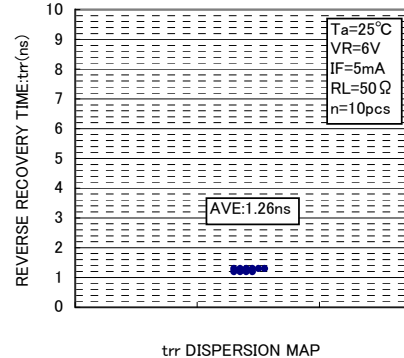
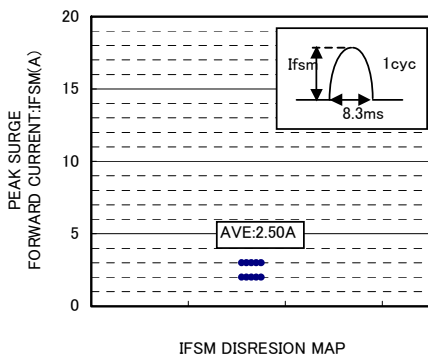
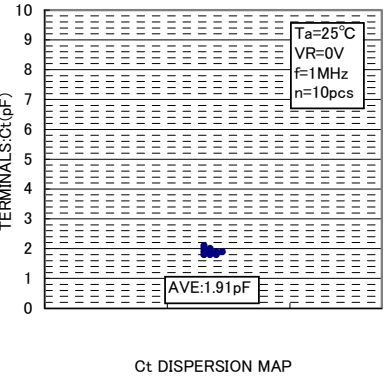
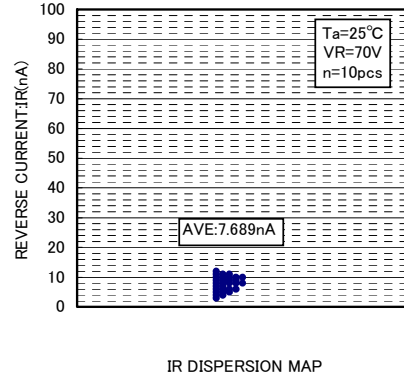
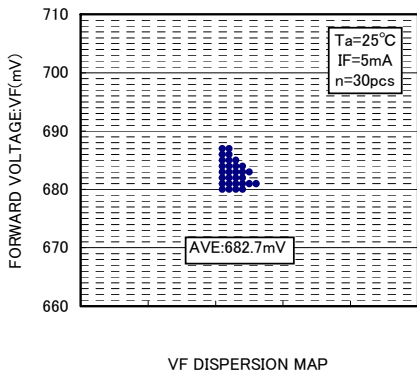
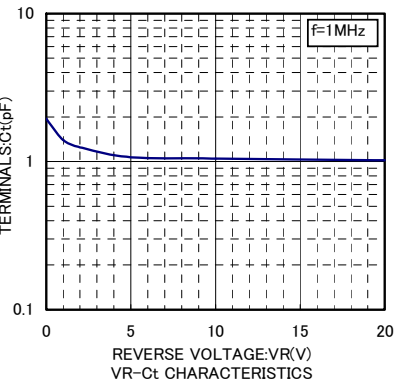
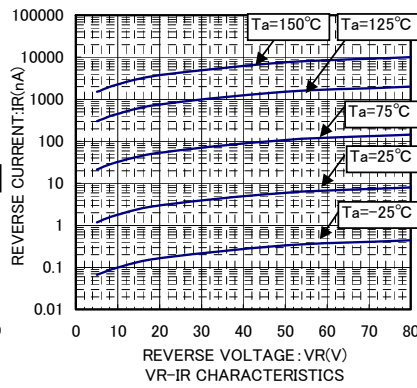
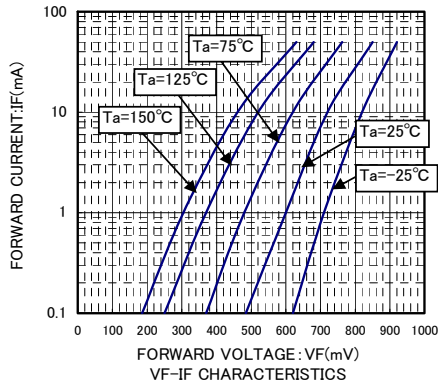


●Absolute maximum ratings (Ta=25°C)

| Parameter                                  | Symbol      | Limits      | Unit |
|--|-------------|-------------|------|
| Reverse voltage (repetitive peak)          | $V_{RM}$    | 80          | V    |
| Reverse voltage (DC)                       | $V_R$       | 80          | V    |
| Forward current (Single)                   | $I_{FM}$    | 80          | mA   |
| Average rectified forward current (single) | $I_o$       | 25          | mA   |
| Surge current (t=1us)                      | $I_{surge}$ | 250         | mA   |
| Power dissipation                          | $P_d$       | 150         | mW   |
| Junction temperature                       | $T_j$       | 150         | °C   |
| Storage temperature                        | $T_{stg}$   | -55 to +150 | °C   |

●Electrical characteristics (Ta=25°C)

| Parameter                     | Symbol   | Min. | Typ. | Max. | Unit | Conditions                 |
|-------------------------------|----------|------|------|------|------|----------------------------|
| Forward voltage               | $V_F$    | -    | -    | 0.9  | V    | $I_F=5mA$                  |
| Reverse current               | $I_R$    | -    | -    | 0.1  | μA   | $V_R=70V$                  |
| Capacitance between terminals | $C_t$    | -    | -    | 3.5  | pF   | $V_R=6V, f=1MHz$           |
| Reverse recovery time         | $t_{rr}$ | -    | -    | 4    | ns   | $V_R=6V, I_F=5mA, R_L=50Ω$ |



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