

# Switching diode

## UMN10N

●Applications

Very fast recovery

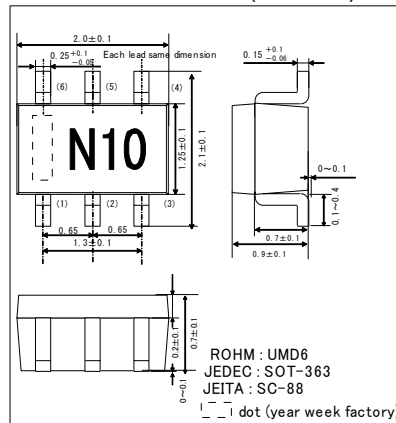
●Features

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

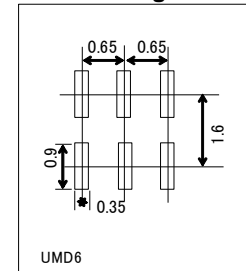
●Construction

Silicon epitaxial planer

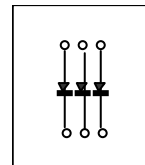
●External dimensions (Unit : mm)



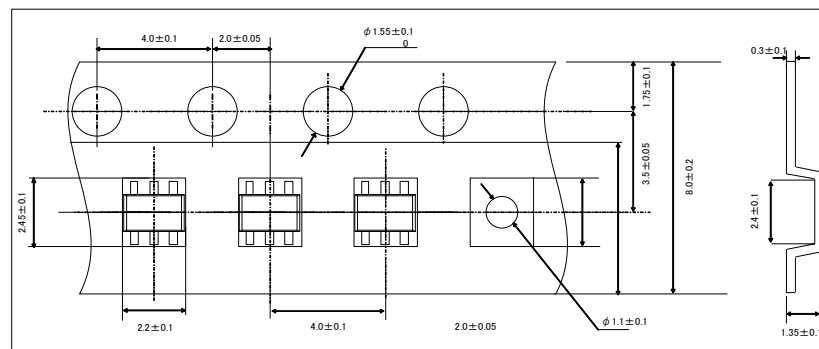
●Land size figure



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

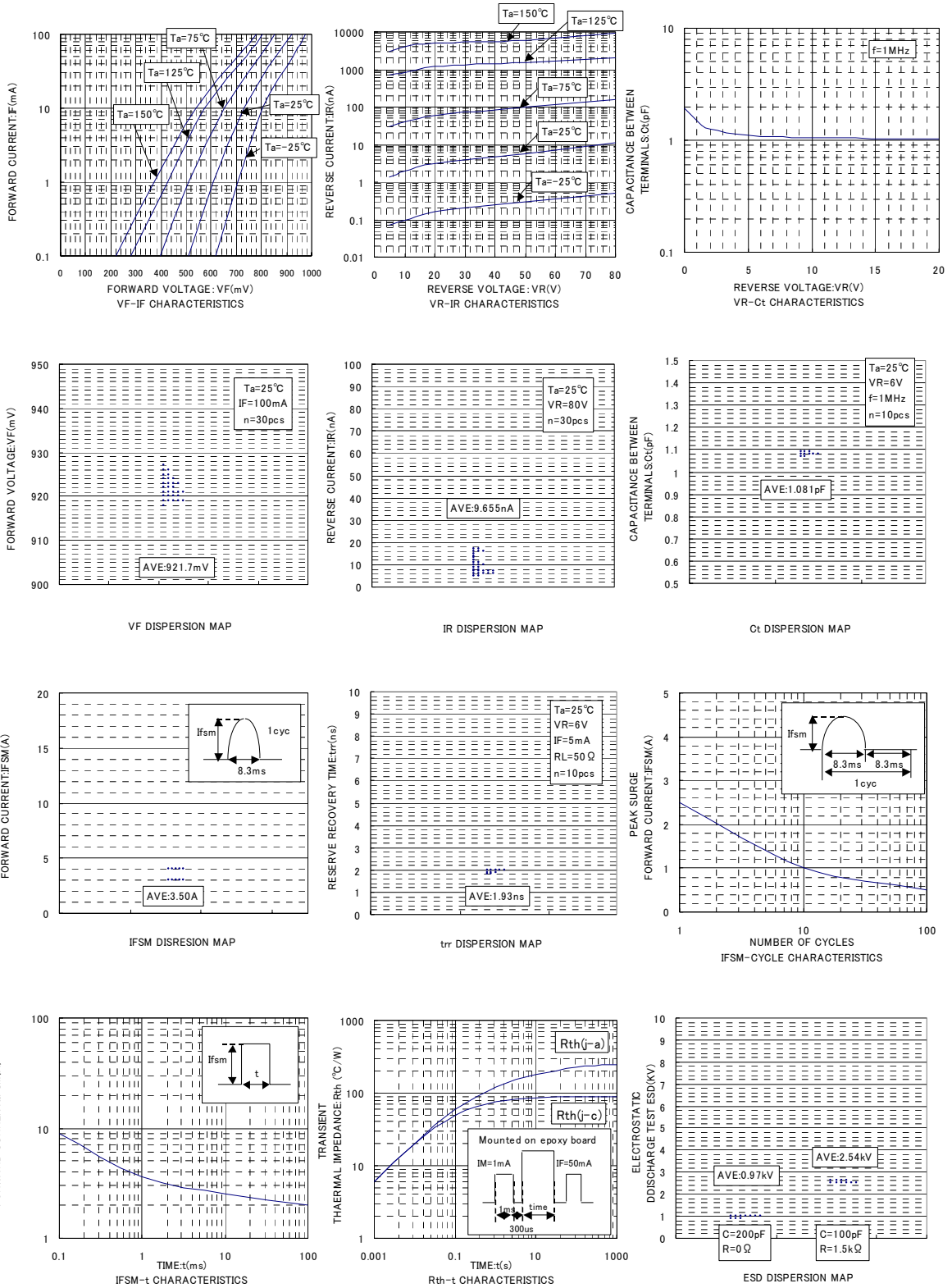
| Parameter                                  | Symbol      | Limits      | Unit |
|--|-------------|-------------|------|
| Reverse voltage (repetitive peak)          | $V_{RM}$    | 80          | V    |
| Reverse voltage (DC)                       | $V_R$       | 80          | V    |
| Forward current repetitive peak (Single)   | $I_{FM}$    | 300         | mA   |
| Average rectified forward current (Single) | $I_o$       | 100         | mA   |
| Surge current (t=1us)                      | $I_{surge}$ | 4           | A    |
| Power dissipation                          | $P_d$       | 200         | mW   |
| Junction temperature                       | $T_j$       | 150         | °C   |
| Storage temperature                        | $T_{stg}$   | -55 to +150 | °C   |

●Electrical characteristic (Ta=25°C)

| Parameter                    | Symbol   | Min. | Typ. | Max. | Unit | Conditions                      |
|------------------------------|----------|------|------|------|------|---------------------------------|
| Forward voltage              | $V_F$    | -    | -    | 1.2  | V    | $I_F=100mA$                     |
| Reverse current              | $I_R$    | -    | -    | 0.1  | μA   | $V_R=70V$                       |
| Capacitance between terminal | $C_t$    | -    | -    | 3.5  | pF   | $V_R=6V, f=1MHz$                |
| Reverse recovery time        | $t_{rr}$ | -    | -    | 4    | ns   | $V_R=6V, I_F=5mA, R_L=50\Omega$ |

Diodes

●Electrical characteristic curves



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