

### ●Application

Small current rectification

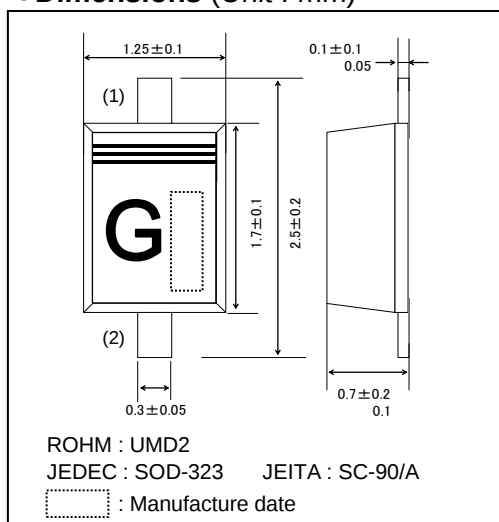
### ●Features

- 1) Ultra small mold type (UMD2)
- 2) High reliability
- 3) Super low  $V_F$

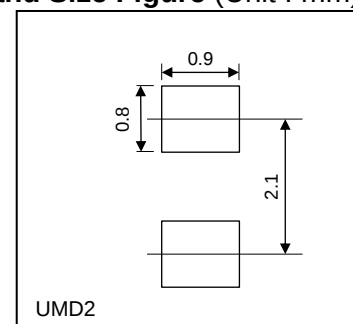
### ●Construction

Silicon epitaxial planar type

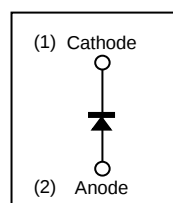
### ●Dimensions (Unit : mm)



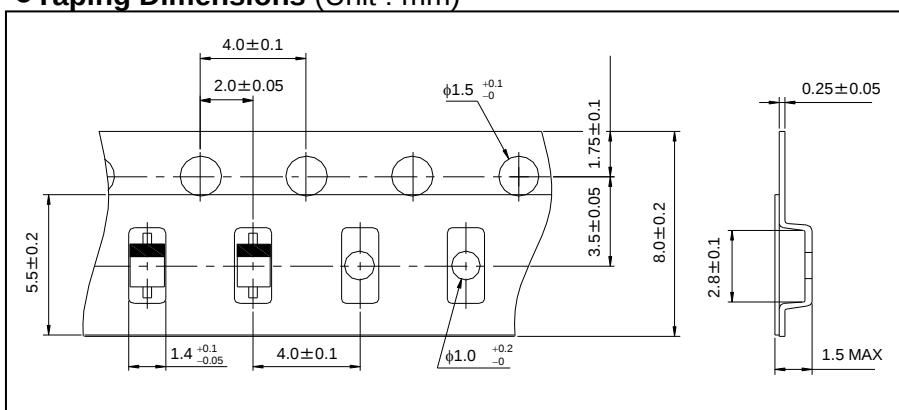
### ●Land Size Figure (Unit : mm)



### ●Structure



### ●Taping Dimensions (Unit : mm)



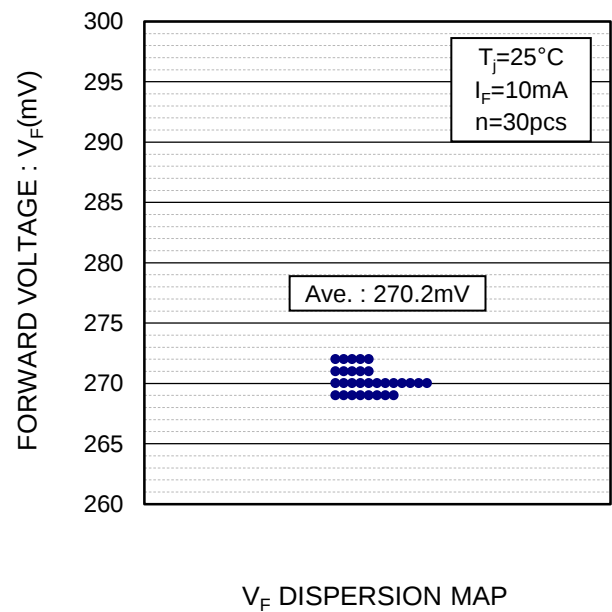
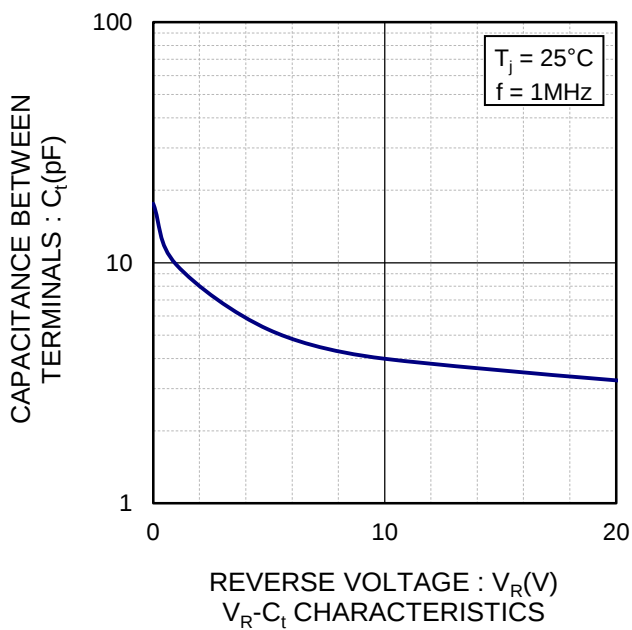
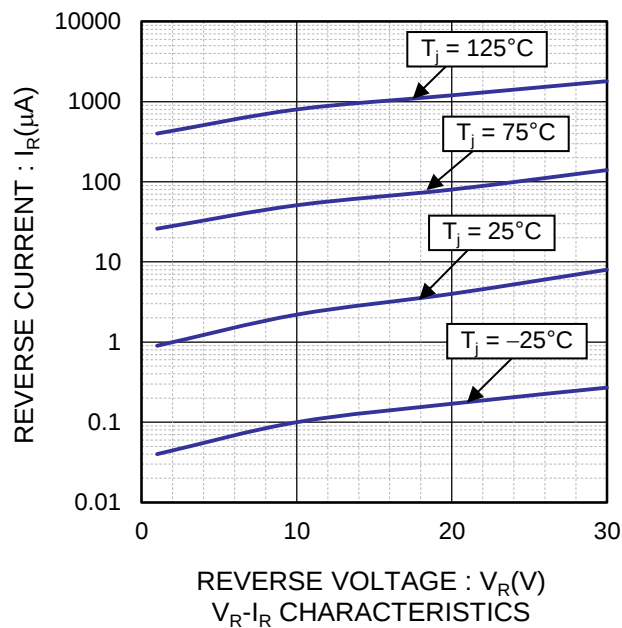
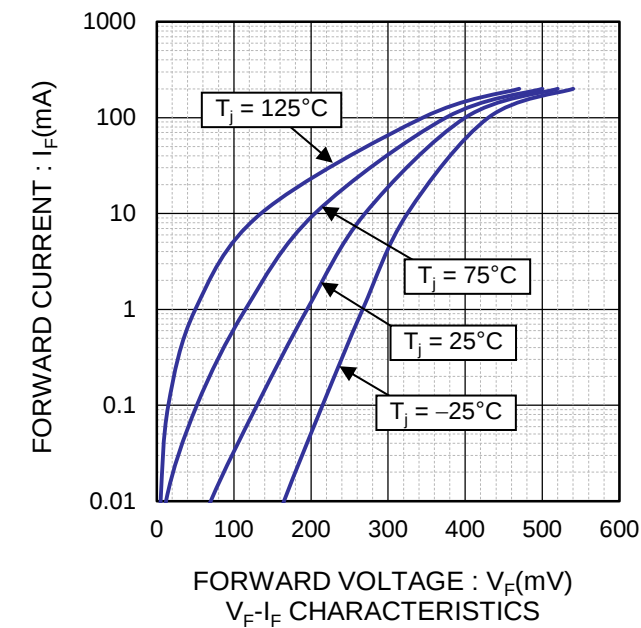
### ●Absolute Maximum Ratings ( $T_c = 25^\circ\text{C}$ )

| Parameter                                 | Symbol    | Conditions                                                              | Limits      | Unit             |
|-------------------------------------------|-----------|-------------------------------------------------------------------------|-------------|------------------|
| Repetitive peak reverse voltage           | $V_{RM}$  | Duty $\leq 0.5$                                                         | 30          | V                |
| Reverse voltage                           | $V_R$     | Direct reverse voltage                                                  | 30          | V                |
| Average forward rectified current         | $I_o$     | Glass epoxy board mounted, 60Hz half sin wave, resistive load           | 100         | mA               |
| Non-repetitive forward current surge peak | $I_{FSM}$ | 60Hz half sin wave, Non-repetitive at $T_a = 25^\circ\text{C}$ , 1cycle | 1           | A                |
| Operating junction temperature            | $T_j$     | -                                                                       | 125         | $^\circ\text{C}$ |
| Storage temperature                       | $T_{stg}$ | -                                                                       | -55 to +125 | $^\circ\text{C}$ |

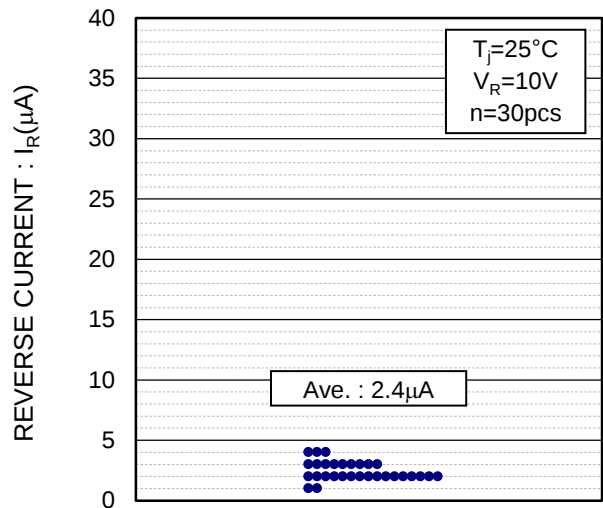
### ●Electrical Characteristics ( $T_j = 25^\circ\text{C}$ )

| Parameter       | Symbol   | Conditions           | Min. | Typ. | Max. | Unit          |
|-----------------|----------|----------------------|------|------|------|---------------|
| Forward voltage | $V_{F1}$ | $I_F = 10\text{mA}$  | -    | -    | 0.35 | V             |
|                 | $V_{F2}$ | $I_F = 100\text{mA}$ | -    | -    | 0.49 | V             |
| Reverse current | $I_{R1}$ | $V_R = 10\text{V}$   | -    | -    | 10   | $\mu\text{A}$ |
|                 | $I_{R2}$ | $V_R = 30\text{V}$   | -    | -    | 45   | $\mu\text{A}$ |

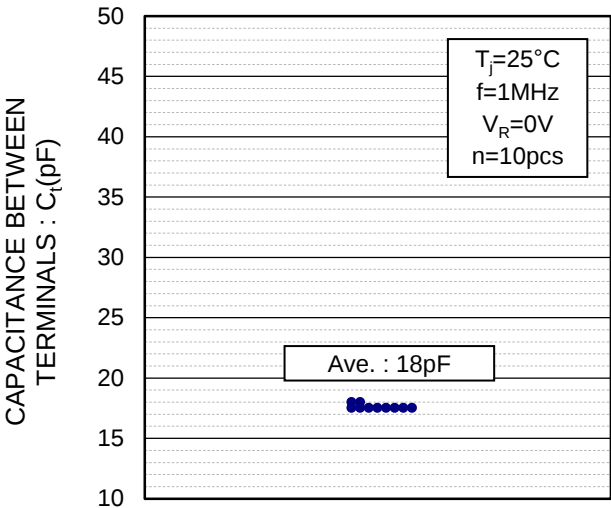
●Electrical Characteristic Curves



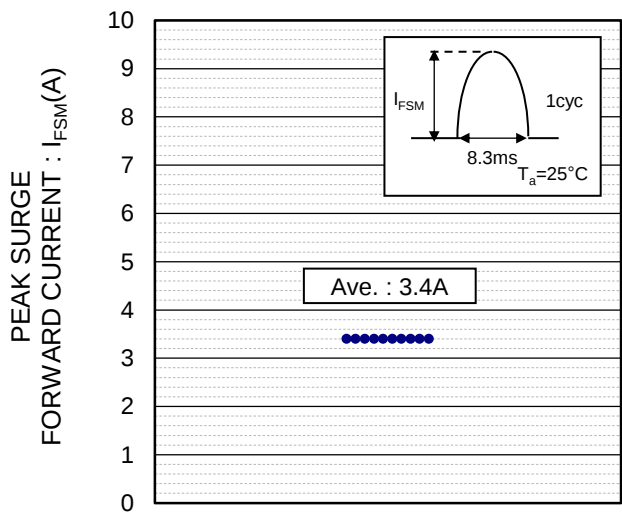
●Electrical Characteristic Curves



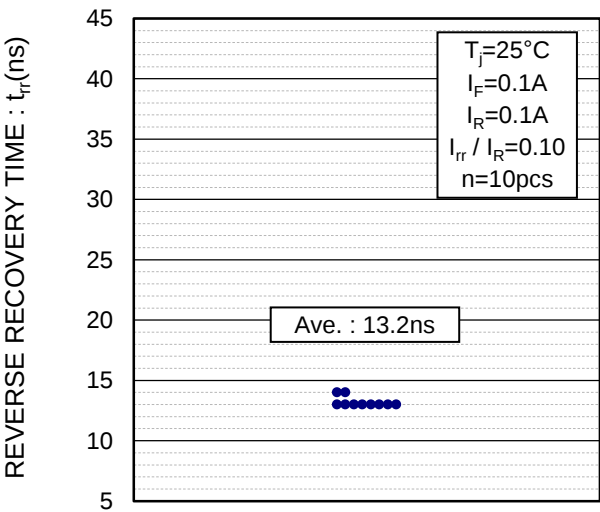
$I_R$  DISPERSION MAP



$C_t$  DISPERSION MAP

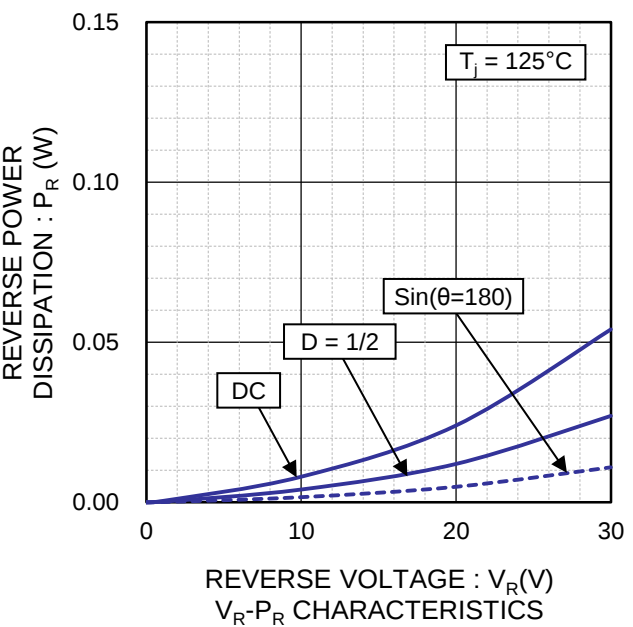
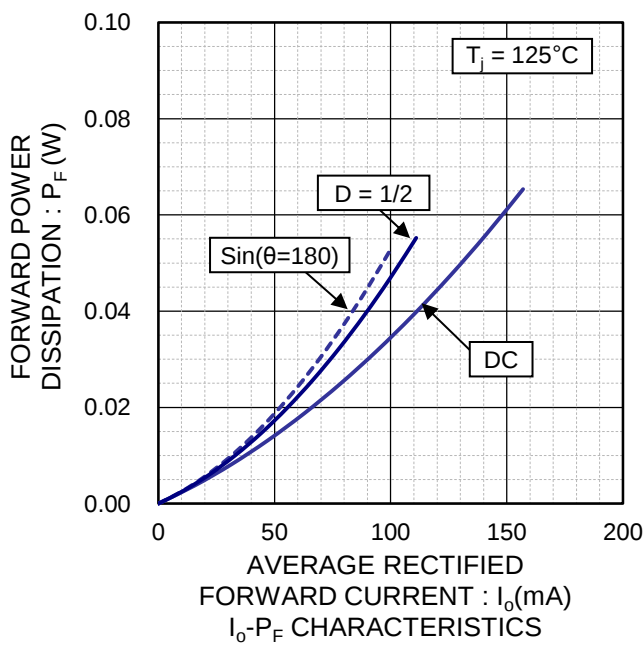
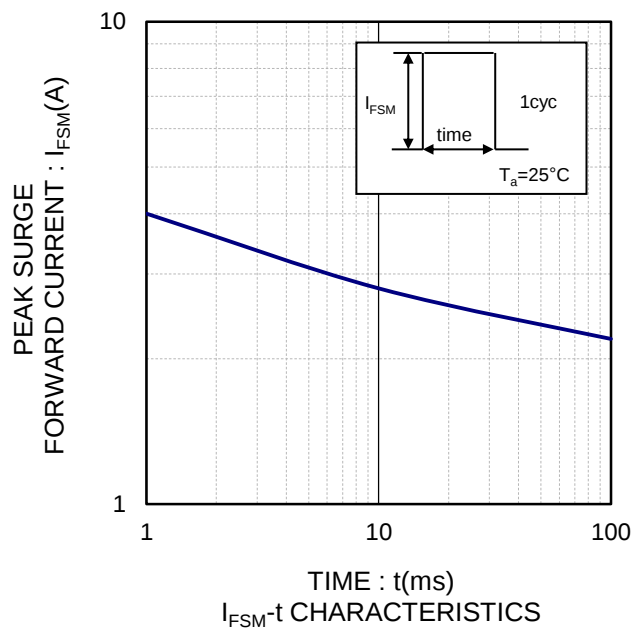
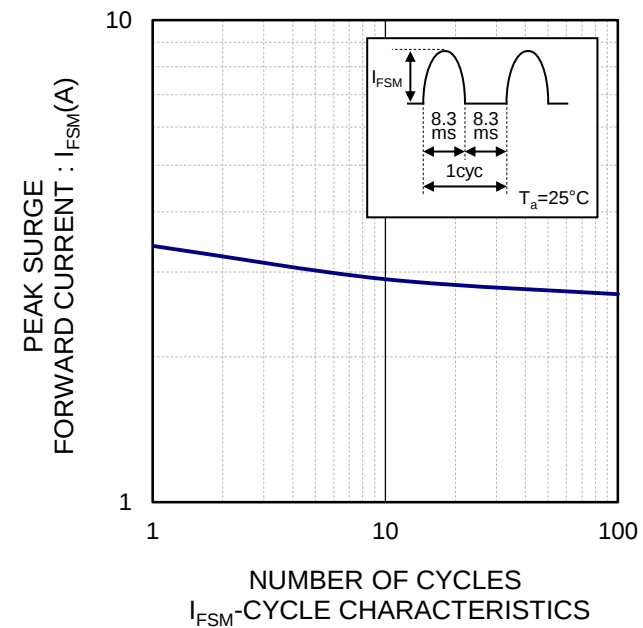


$I_{FSM}$  DISPERSION MAP

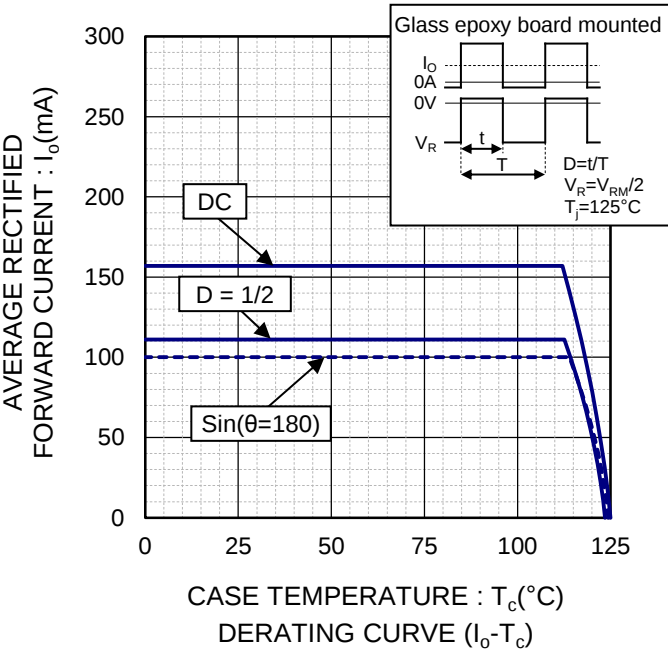
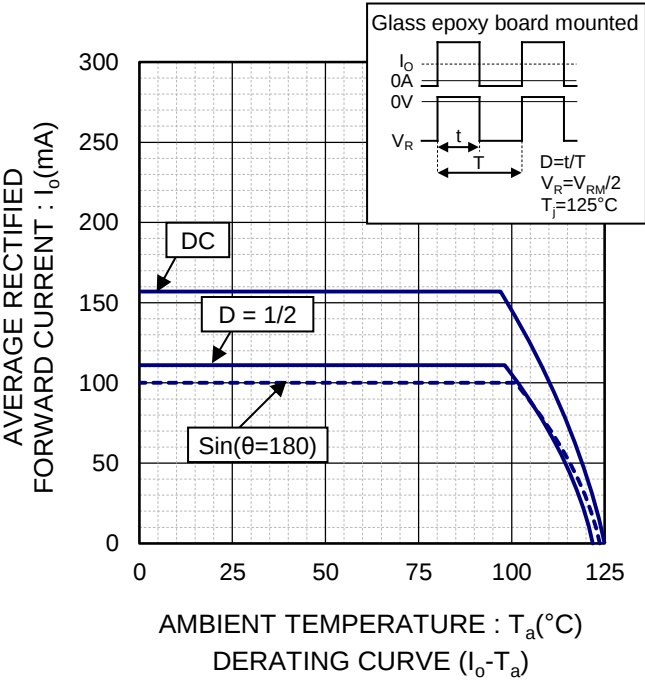
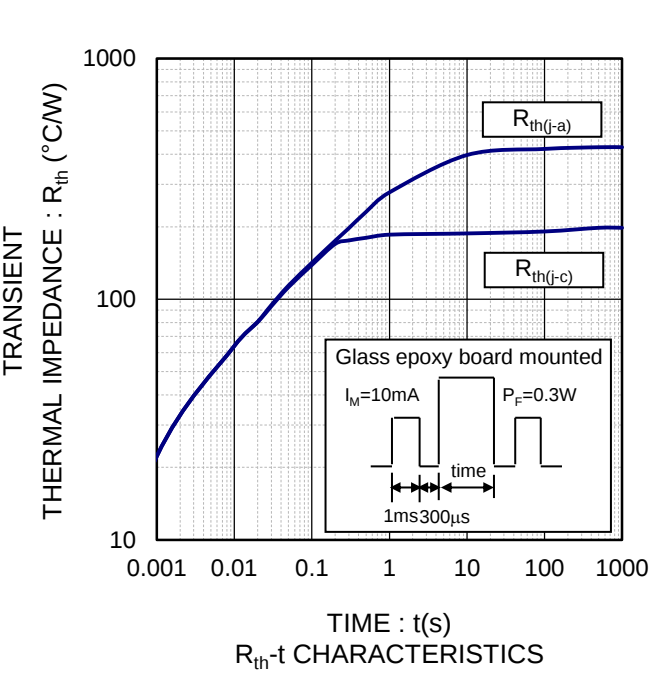


$t_{rr}$  DISPERSION MAP

●Electrical Characteristic Curves



●Electrical Characteristic Curves



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