

Diodes

Schottky barrier diode

RB421D

●Applications

Low power rectification

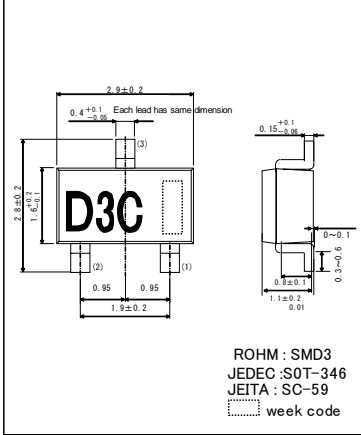
●Features

- 1) Small mold type. (SMD3)
- 2) Low  $I_R$ .
- 3) High reliability.

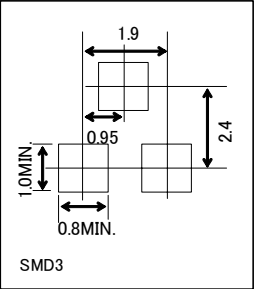
●Construction

Silicon epitaxial planar

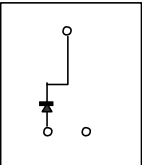
●External dimensions (Unit : mm)



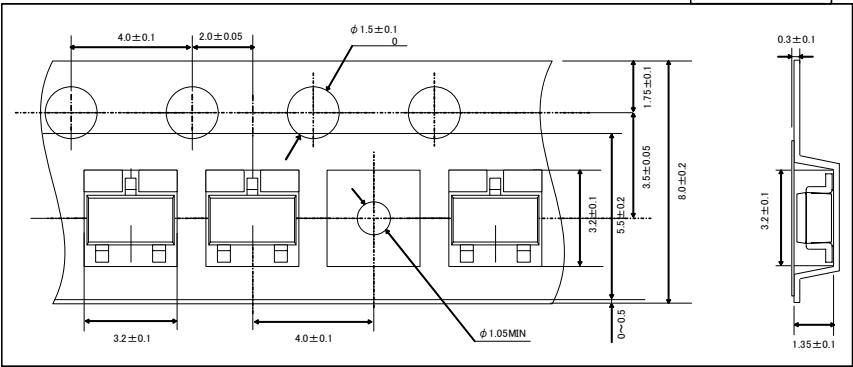
●Land size figure (Unit : mm)



●Structure



●Taping specification (Unit : mm)



●Absolute maximum ratings (Ta = 25°C)

| Parameter                                   | Symbol    | Limits      | Unit |
|---|-----------|-------------|------|
| Reverse voltage (repetitive peak)           | $V_{RM}$  | 40          | V    |
| Reverse voltage (DC)                        | $V_R$     | 40          | V    |
| Average rectified forward current (*1)      | $I_o$     | 100         | mA   |
| Forward current surge peak (60Hz·1cyc) (*1) | $I_{FSM}$ | 1           | A    |
| Junction temperature                        | $T_j$     | 125         | °C   |
| Storage temperature                         | $T_{stg}$ | -40 to +125 | °C   |

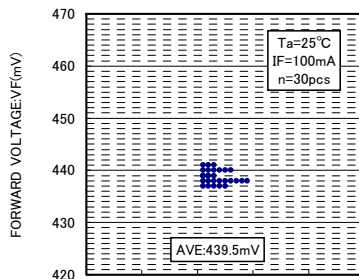
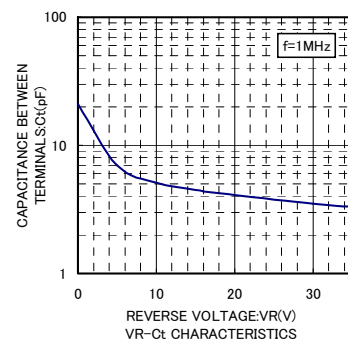
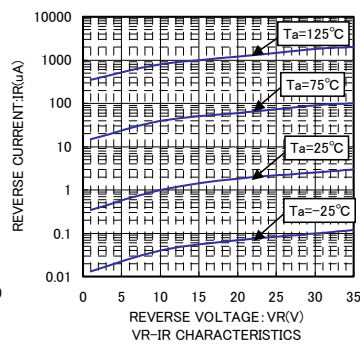
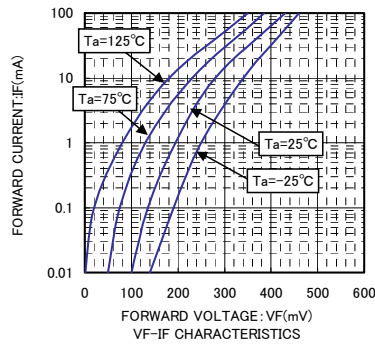
(\*1) Rating of per diode

●Electrical characteristics (Ta = 25°C)

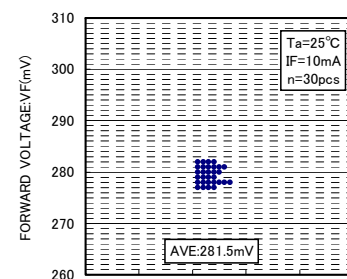
| Parameter                     | Symbol   | Min. | Typ. | Max. | Unit    | Conditions           |
|-------------------------------|----------|------|------|------|---------|----------------------|
| Forward voltage               | $V_{F1}$ | -    | -    | 0.55 | V       | $I_F=100mA$          |
|                               | $V_{F2}$ | -    | -    | 0.34 | V       | $I_F=10mA$           |
| Reverse current               | $I_{R1}$ | -    | -    | 30   | $\mu A$ | $V_R=10V$            |
| Capacitance between terminals | $C_{t1}$ | -    | 6    | -    | pF      | $V_R=10V$ , $f=1MHz$ |

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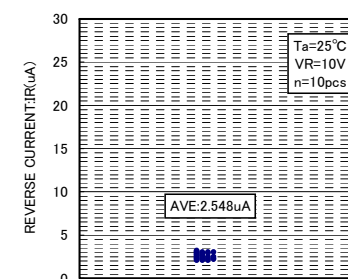
## ●Electrical characteristic curves (Ta = 25°C)



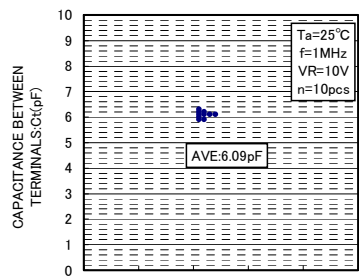
VF DISPERSION MAP



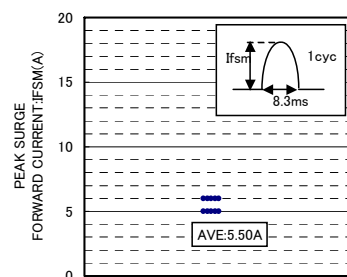
VF DISPERSION MAP



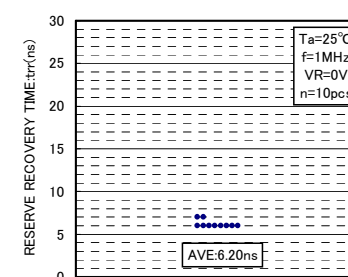
IR DISPERSION MAP



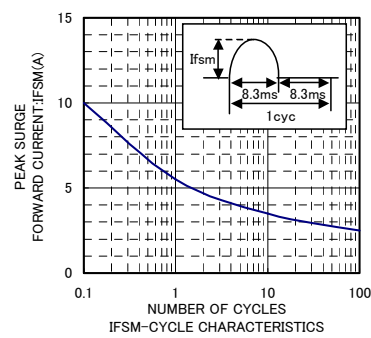
Ct DISPERSION MAP



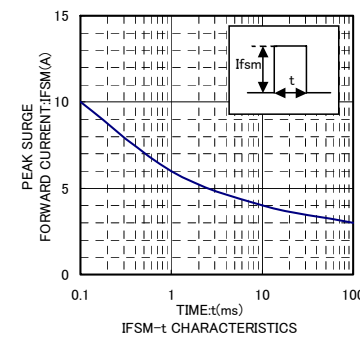
IFSM DISPERSION MAP



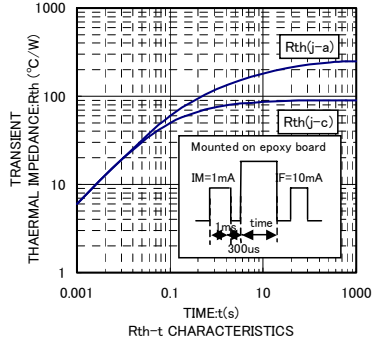
trr DISPERSION MAP



IFSM-CYCLE CHARACTERISTICS

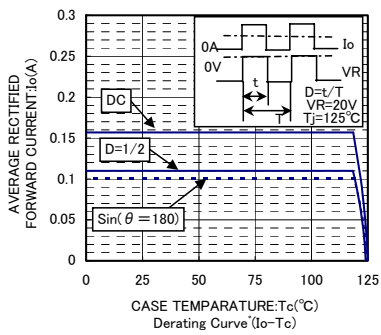
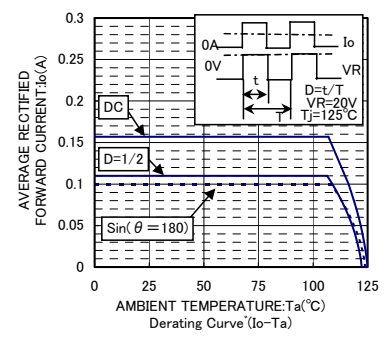
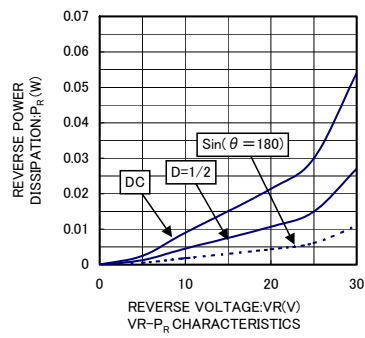
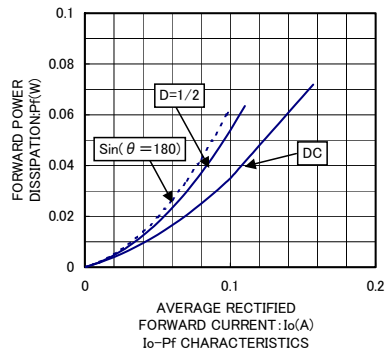


IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

## Diodes



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