

# Schottky Barrier Diode

## RB411D

### ●Applications

Low current rectification

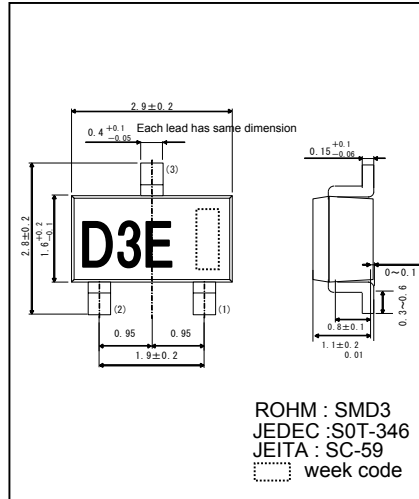
### ●Features

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

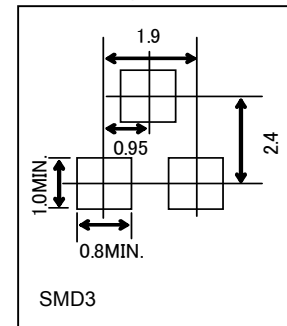
### ●Construction

Silicon epitaxial planer

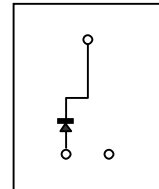
### ●Dimensions (Unit : mm)



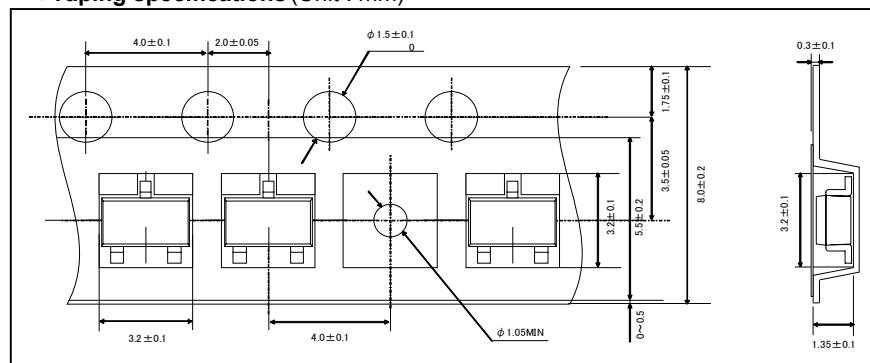
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping specifications (Unit : mm)



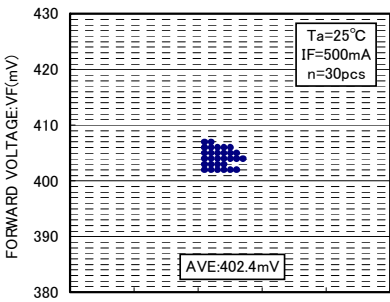
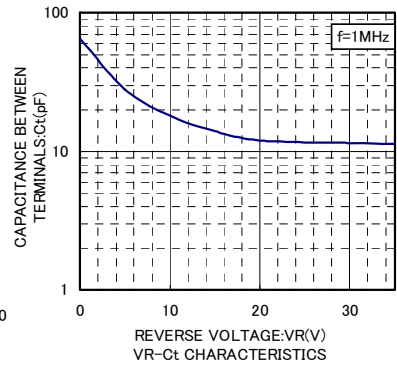
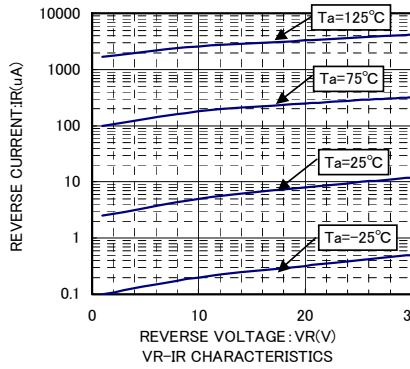
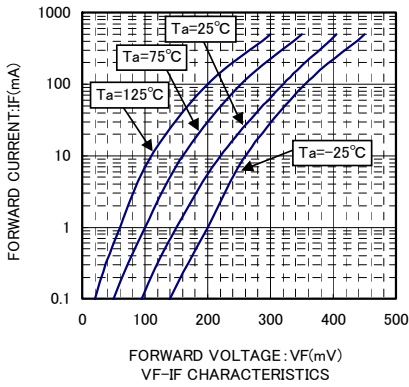
### ●Absolute maximum ratings (Ta=25°C)

| Parameter                                    | Symbol    | Limits      | Unit |
|--|-----------|-------------|------|
| Reverse voltage (repetitive peak)            | $V_{RM}$  | 40          | V    |
| Reverse voltage (DC)                         | $V_R$     | 20          | V    |
| Average rectified forward current(*1)        | $I_o$     | 500         | mA   |
| Forward current surge peak (60Hz / 1cyc)(*1) | $I_{FSM}$ | 3           | A    |
| Junction temperature                         | $T_j$     | 125         | °C   |
| Storage temperature                          | $T_{stg}$ | -40 to +125 | °C   |

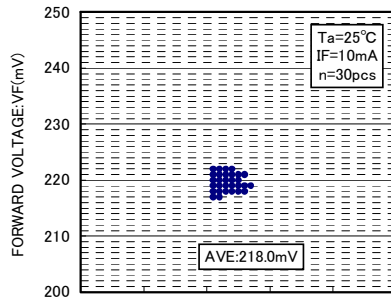
(\*1) Rating of per diode

### ●Electrical characteristics (Ta=25°C)

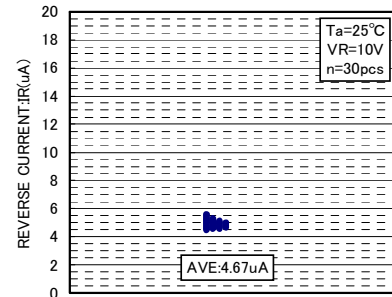
| Parameter                     | Symbol   | Min. | Typ. | Max. | Unit | Conditions        |
|-------------------------------|----------|------|------|------|------|-------------------|
| Forward voltage               | $V_{F1}$ | -    | -    | 0.50 | V    | $I_F=500mA$       |
|                               | $V_{F2}$ | -    | -    | 0.30 | V    | $I_F=10mA$        |
| Reverse current               | $I_{R1}$ | -    | -    | 30   | μA   | $V_R=10V$         |
| Capacitance between terminals | $C_{t1}$ | -    | 20   | -    | pF   | $V_R=10V, f=1MHz$ |



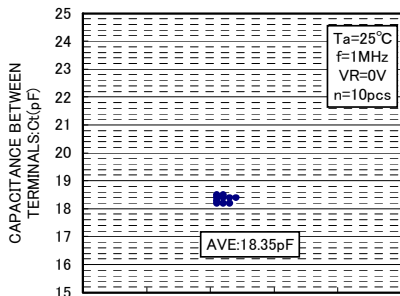
VF DISPERSION MAP



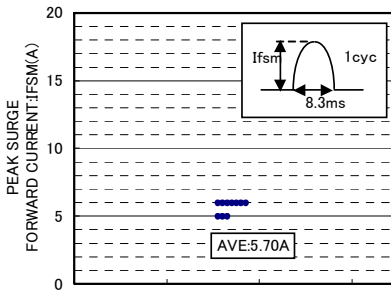
VF DISPERSION MAP



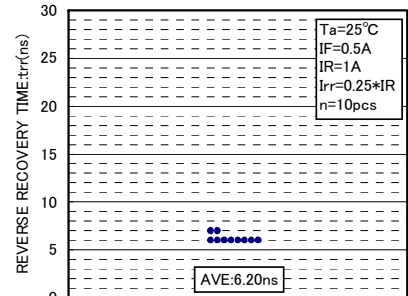
IR DISPERSION MAP



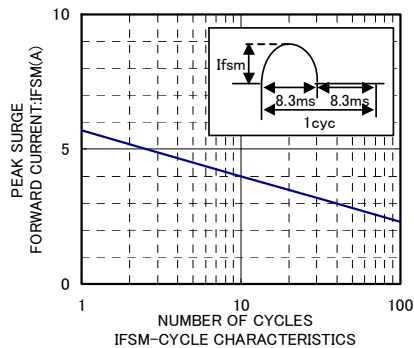
Ct DISPERSION MAP



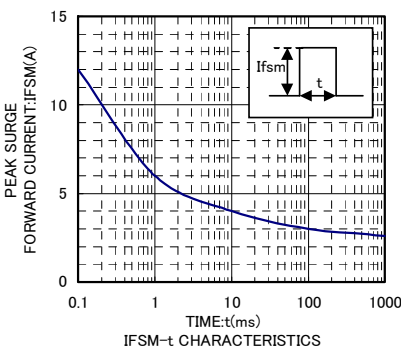
IFSM DISERSION MAP



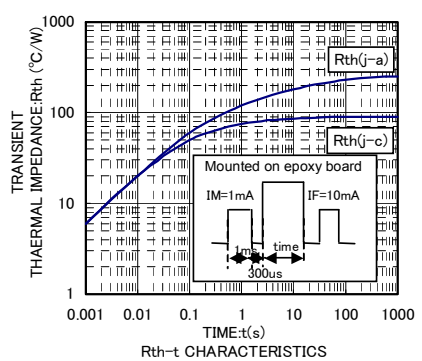
trr DISPERSION MAP



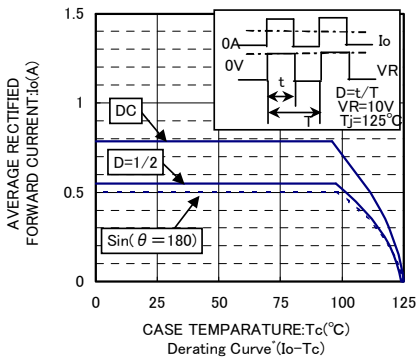
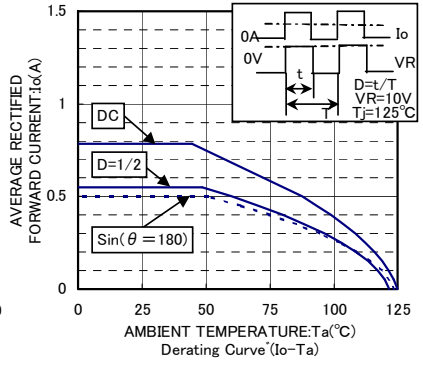
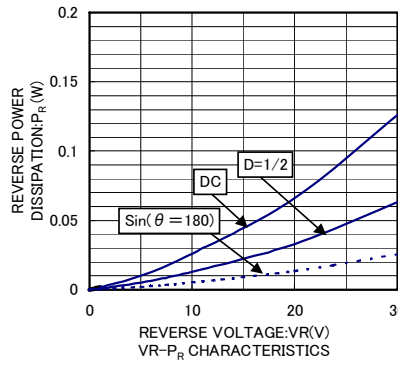
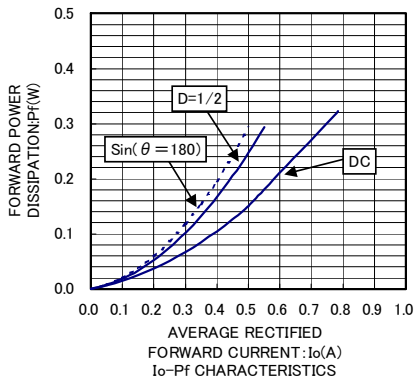
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



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