

## Schottky barrier diode

## RB081L-20

## ● Applications

General rectification

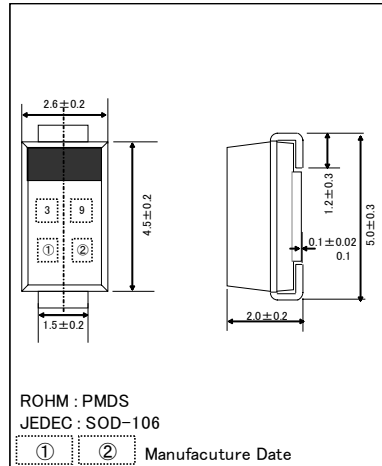
## ● Features

- 1) Small power mold type. (PMDS)
- 2) Low  $V_F$ , Low  $I_R$ .
- 3) High reliability.

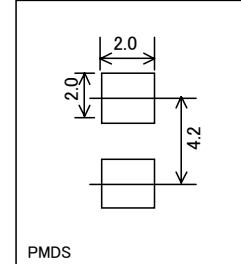
## ● Construction

Silicon epitaxial planar

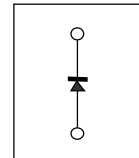
## ● External dimensions (Unit : mm)



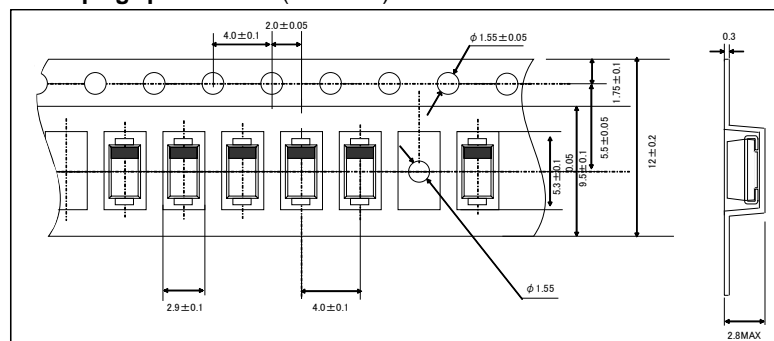
## ● Land size figure (Unit : mm)



## ● Structure



## ● Taping specifications (Unit : mm)

● Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

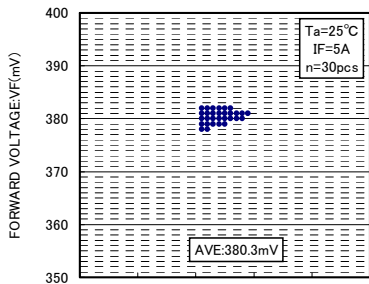
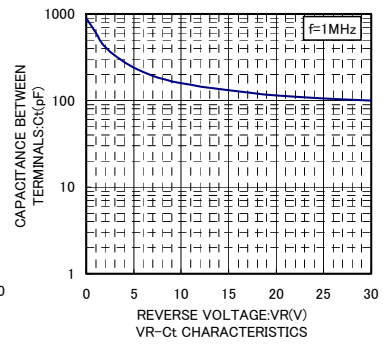
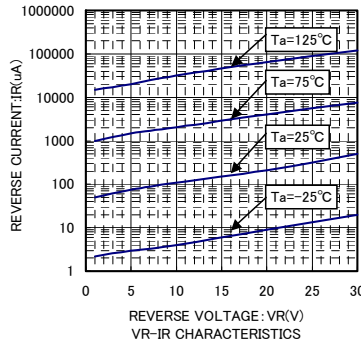
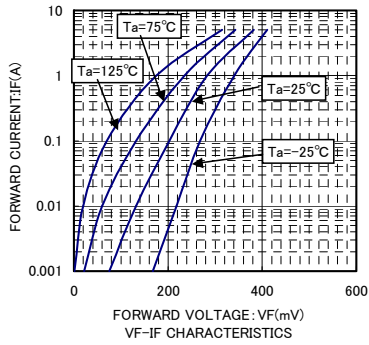
| Parameter                              | Symbol    | Limits      | Unit             |
|--|-----------|-------------|------------------|
| Reverse voltage (repetitive peak)      | $V_{RM}$  | 25          | V                |
| Reverse voltage (DC)                   | $V_R$     | 20          | V                |
| Average rectified forward current (*1) | $I_o$     | 5           | A                |
| Forward current surge peak (60Hz·1cyc) | $I_{FSM}$ | 70          | A                |
| Junction temperature                   | $T_j$     | 125         | $^\circ\text{C}$ |
| Storage temperature                    | $T_{stg}$ | -40 to +125 | $^\circ\text{C}$ |

(\*1) Mounted on epoxy board.  $180^\circ$  Harf sine wave● Electrical characteristics ( $T_a=25^\circ\text{C}$ )

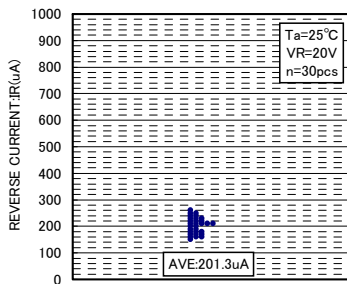
| Parameter       | Symbol | Min. | Typ. | Max. | Unit          | Conditions        |
|-----------------|--------|------|------|------|---------------|-------------------|
| Forward voltage | $V_F$  | -    | -    | 0.45 | V             | $I_F=0.5\text{A}$ |
| Reverse current | $I_R$  | -    | -    | 700  | $\mu\text{A}$ | $V_R=20\text{V}$  |

Diodes

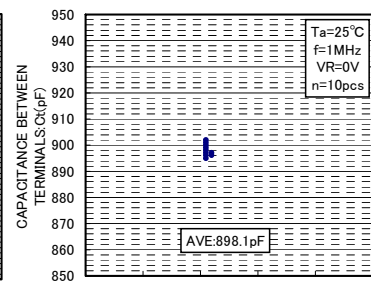
●Electrical characteristic curves (Ta=25°C)



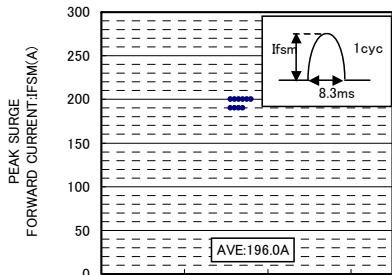
VF DISPERSION MAP



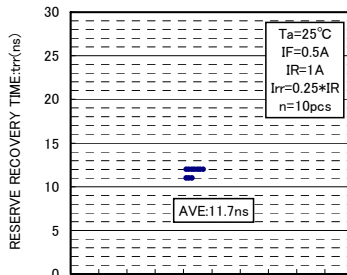
IR DISPERSION MAP



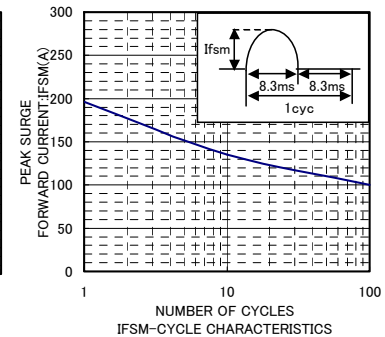
Ct DISPERSION MAP



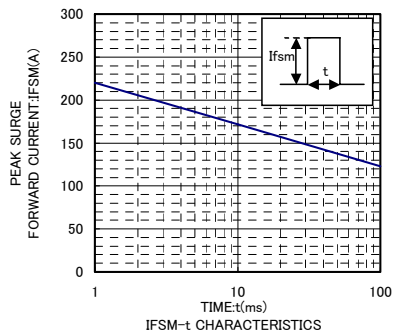
IFSM DISERSION MAP



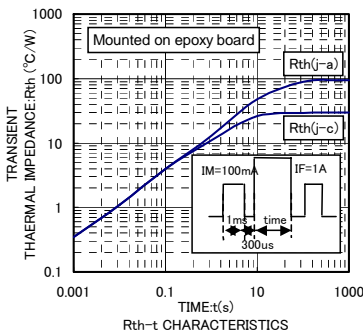
trr DISPERSION MAP



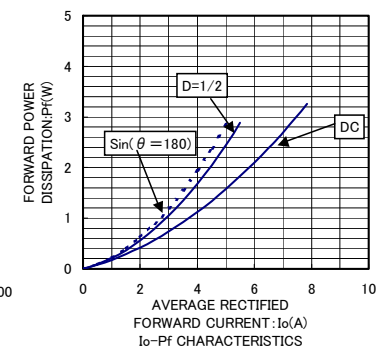
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

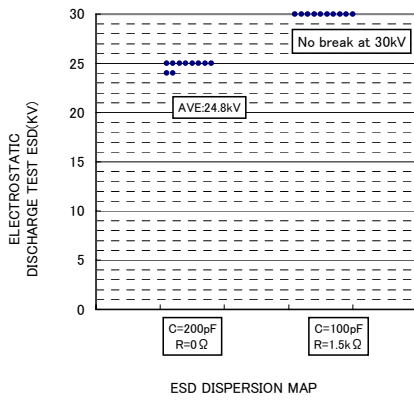
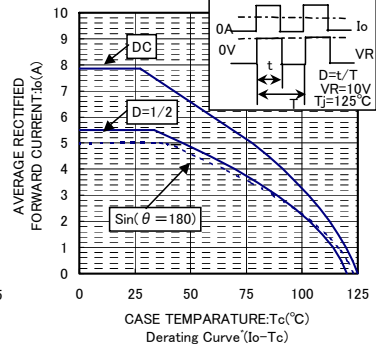
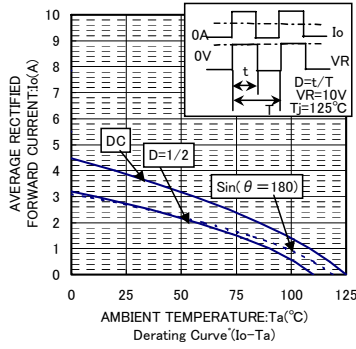
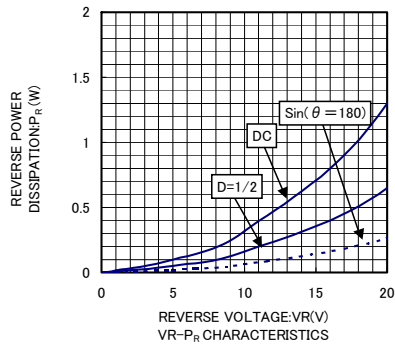


Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS

Diodes



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