

Schottky barrier diode

RB481Y

●Applications

Low current rectification

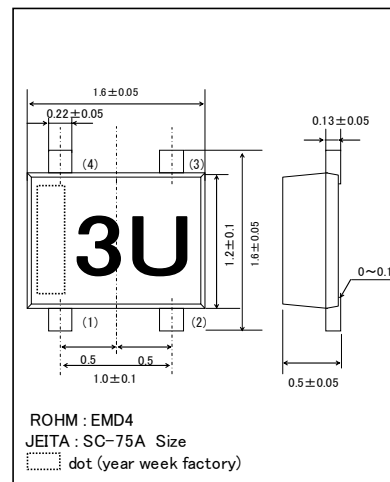
●Features

- 1) Ultra Small power mold type. (EMD4)
- 2) Low V_F
- 3) High reliability.

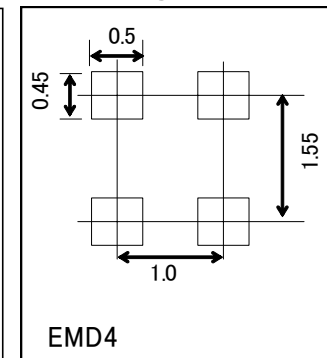
●Construction

Silicon epitaxial planar

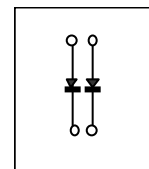
●Dimensions (Unit : mm)



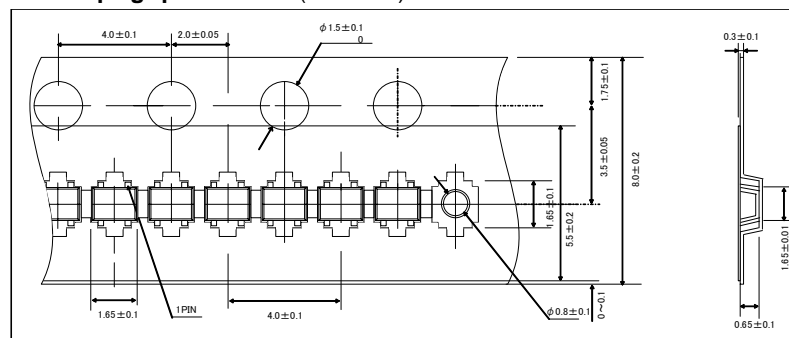
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)

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

| Parameter | Symbol | Limits | Unit |
|---|-----------|-------------|------------------|
| Reverse voltage | V_R | 30 | 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 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | -40 to +125 | $^\circ\text{C}$ |

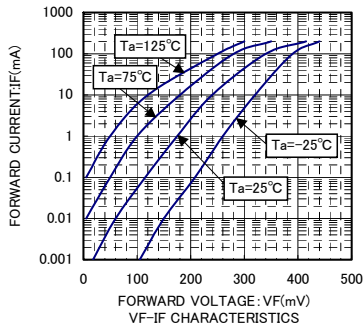
(*1) Rating of per diode

●Electrical characteristics ($T_a=25^\circ\text{C}$)

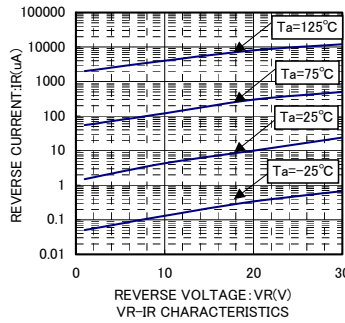
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------|----------|------|------|------|---------------|--------------------|
| Forward voltage | V_{F1} | - | - | 0.28 | V | $I_F=1\text{mA}$ |
| | V_{F2} | - | - | 0.33 | V | $I_F=10\text{mA}$ |
| | V_{F3} | - | - | 0.43 | V | $I_F=100\text{mA}$ |
| Reverse current | I_R | - | - | 30 | μA | $V_R=10\text{V}$ |

Diodes

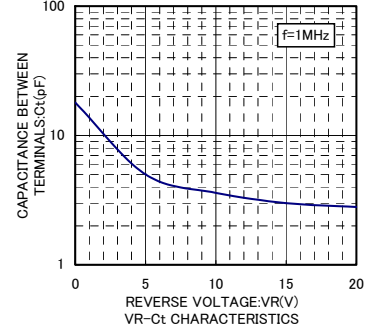
●Electrical characteristic curves (Ta=25°C)



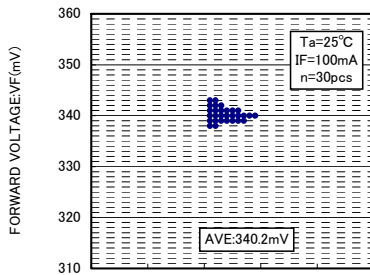
VF分布



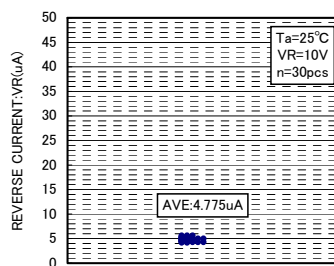
VR-IR CHARACTERISTICS



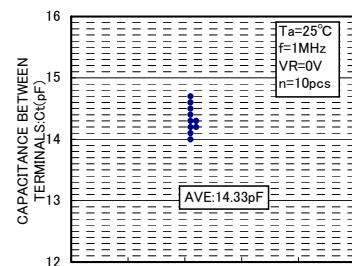
VR-Ct CHARACTERISTICS



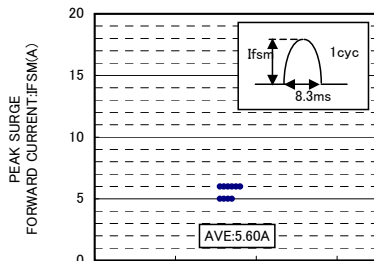
VF DISPERSION MAP



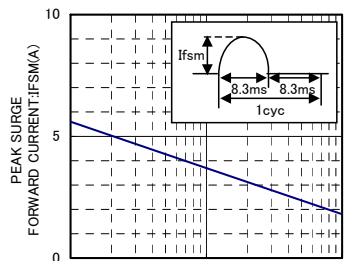
IR DISPERSION MAP



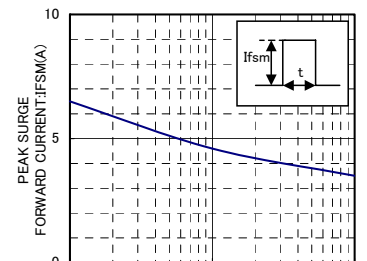
Ct DISPERSION MAP



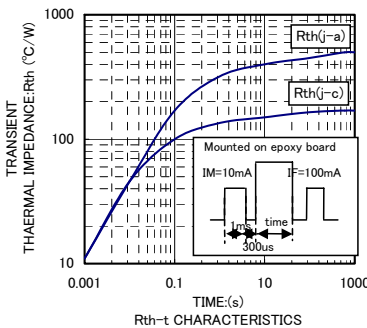
IFSM DISPERSION MAP



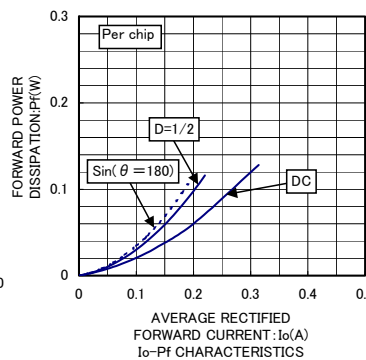
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



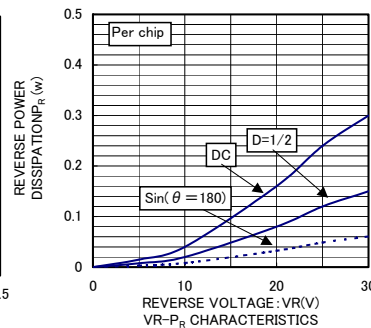
TIME:t(ms)
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

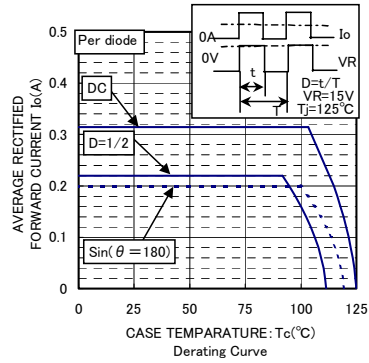
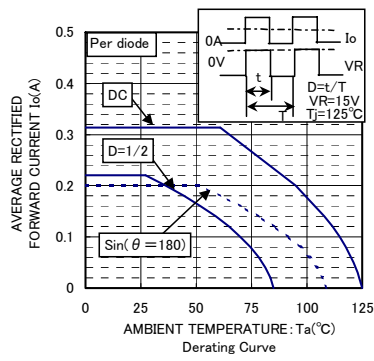


AVERAGE RECTIFIED
FORWARD CURRENT:Io(A)
Io-Pf CHARACTERISTICS



REVERSE VOLTAGE:VR(V)
VR-Pr CHARACTERISTICS

Diodes



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