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ROHM SEMICONDUCTOR

Data Sheet

# Shottky barrier diode

## RB715W

### ●Applications

Low current rectification

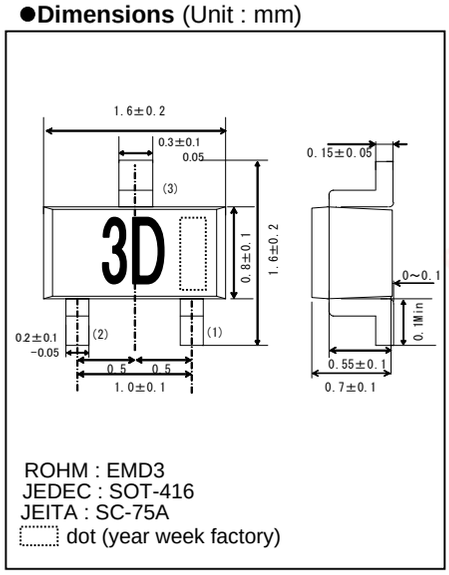
### ●Features

1) Ultra small power mold type. (EMD3)
2) Low $I_R$
3) High reliability.

### ●Construction

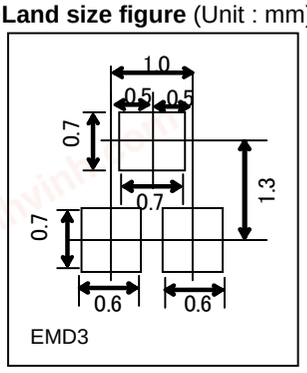
Silicon epitaxial planar

### ●Dimensions (Unit : mm)



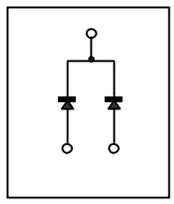

ROHM : EMD3
JEDEC : SOT-416
JEITA : SC-75A
dot (year week factory)

### ●Land size figure (Unit : mm)

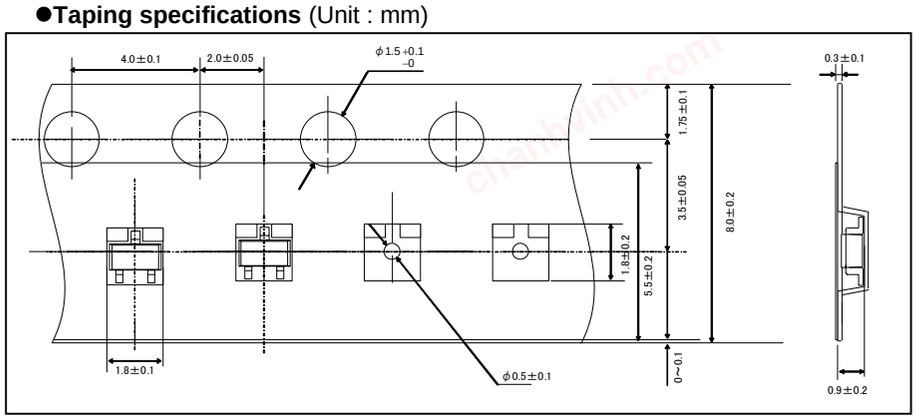



EMD3

### ●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) | $V_R$ | 40 | V |
| Average rectified forward current | Io | 30 | mA |
| Forward current surge peak (60Hz・1cyc) (*1) | $I_{FSM}$ | 200 | mA |
| Junction temperature | Tj | 125 | °C |
| Storage temperature | Tstg | −40 to +125 | °C |

(*1) Rating of per diode

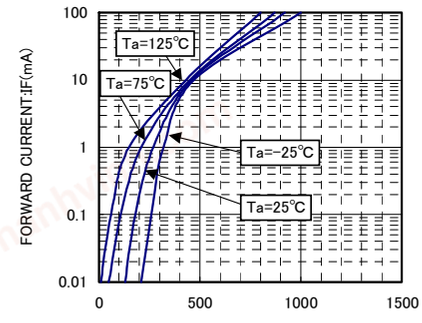
### ●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | - | - | 0.37 | V | $I_F$=1mA |
| Reverse current | $I_R$ | - | - | 1 | μA | $V_R$=10V |
| Capacitance between terminals | Ct | - | 2.0 | - | pF | $V_R$=1.0V f=1.0MHz |

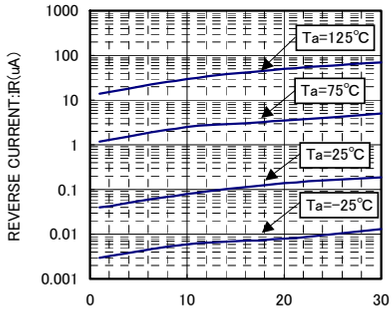

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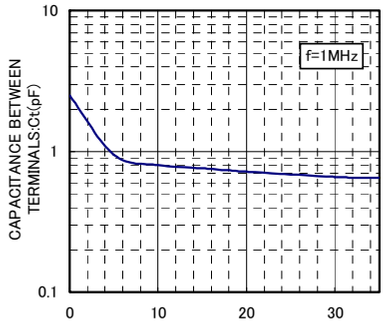




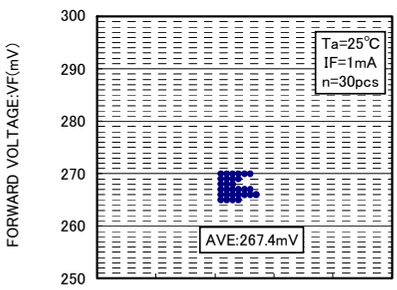

VF-IF CHARACTERISTICS



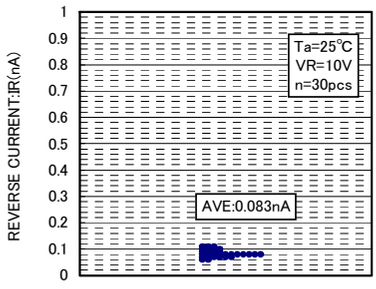

VR-IR CHARACTERISTICS



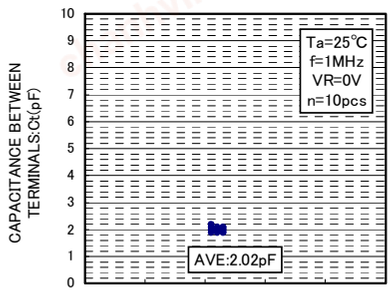

VR-Ct CHARACTERISTICS



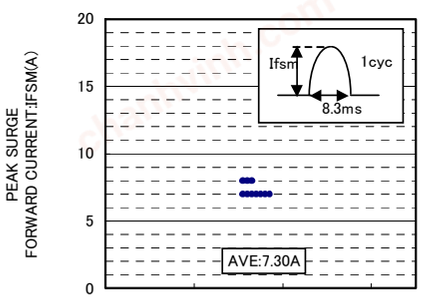

VF DIPERSION MAP



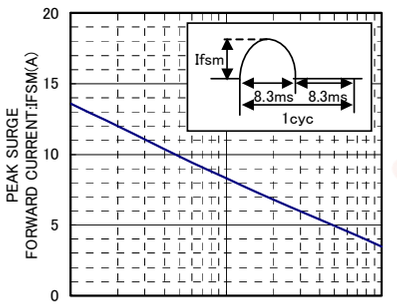

IR DISPERSION MAP



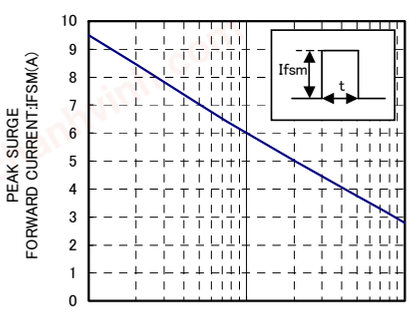

Ct DISPERSION MAP



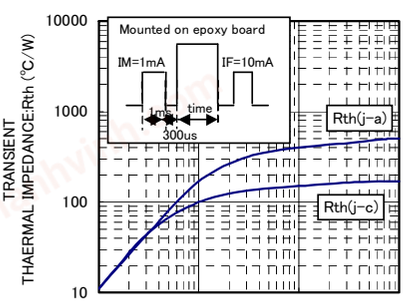

IFSM DISPERSION MAP



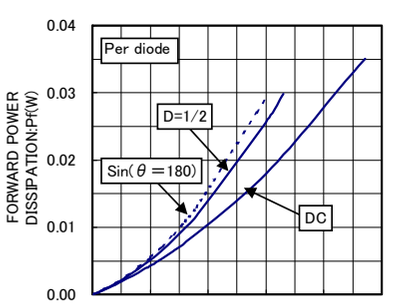

IFSM-CYCLE CHARACTERISTICS



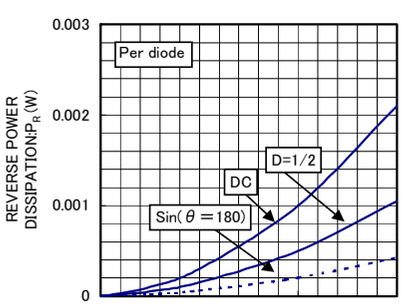

IFSM-t CHARACTERISTICS




Rth-t CHARACTERISTICS




Io-Pf CHARACTERISTICS

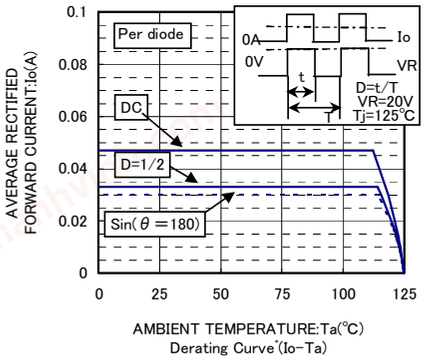


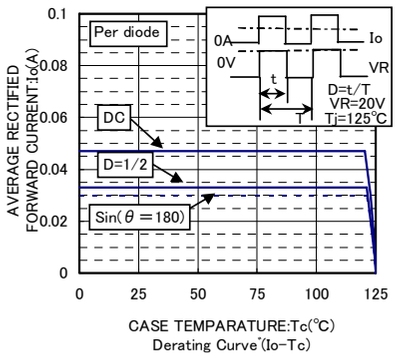

VR-PR CHARACTERISTICS


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