# Schottky Barrier Diode

**RB085BM-30**

Data Sheet

## ●Application

General Rectification

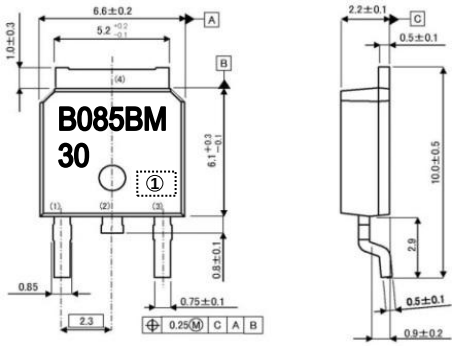
## ●Features

1) Power mold type (TO-252)
2) Cathode common dual type
3) High reliability
4) Low $V_F$

## ●Construction

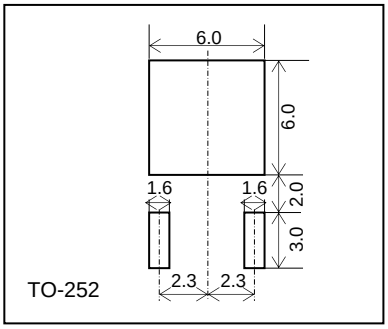
Silicon epitaxial planar type

## ●Dimensions (Unit : mm)

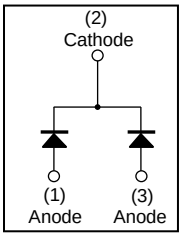



ROHM : TO-252
JEITA : SC-63
① : Manufacture Date

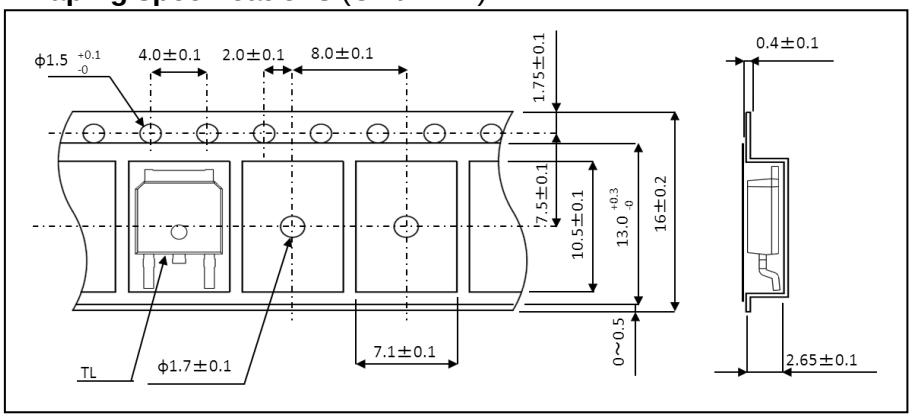
## ●Land size figure (Unit : mm)




## ●Structure




## ●Taping specifications (Unit : mm)



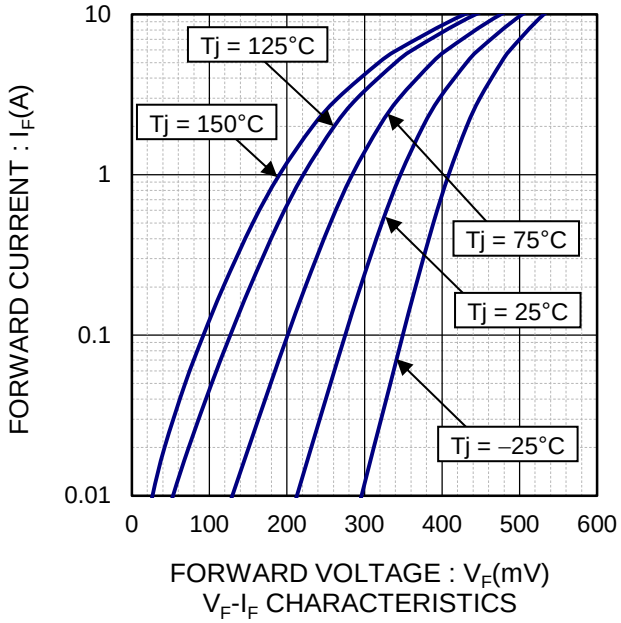

## ●Absolute maximum ratings ($T_c$= 25°C)

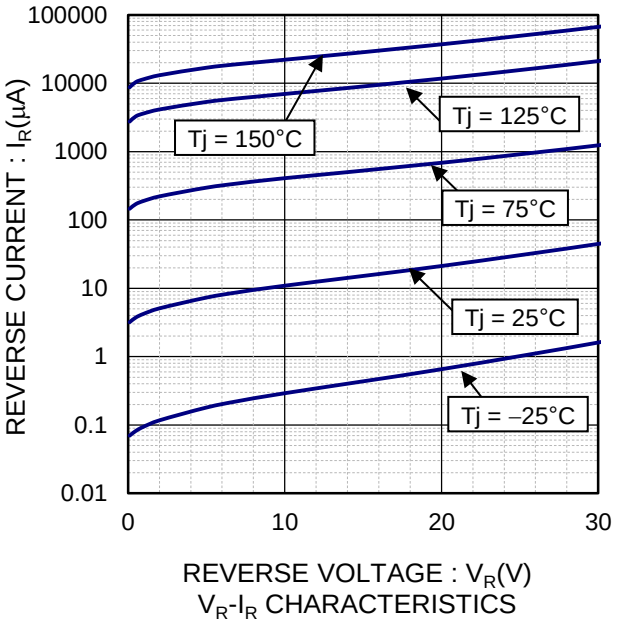
| Parameter | Symbol | Limits | Unit | Conditions |
|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RM}$ | 35 | V | Duty≦0.5 |
| Reverse Voltage | $V_R$ | 30 | V | Direct Reverse Voltage |
| Average forward rectified current | $I_o$ | 10 | A | 60Hz half sin Wave resistive load, $T_c$=102°C max., 1/2 Io per diode |
| Non-repetitive Forward Current Surge Peak | $I_{FSM}$ | 50 | A | 60Hz half sin wave, Non-repetitive at $T_a$=25ºC, per diode |
| Operating Junction Temperature | $T_j$ | 150 | °C | - |
| Storage Temperature | $T_{stg}$ | −40 to +150 | °C | - |

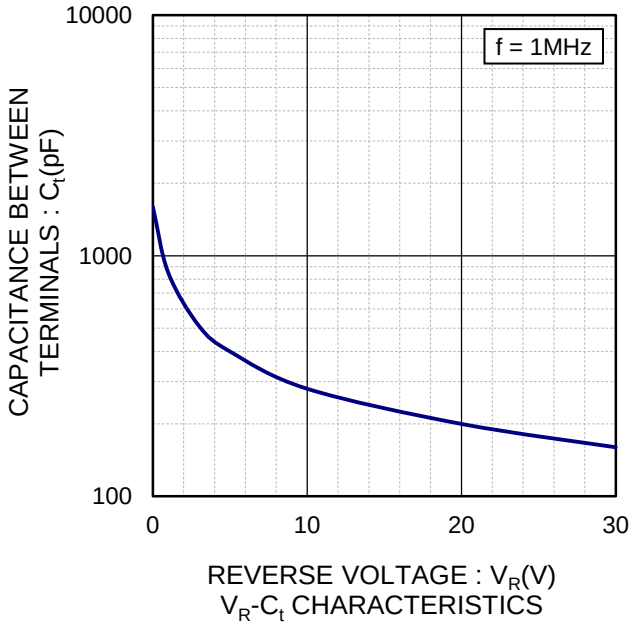
## ●Electrical characteristics ($T_j$ = 25°C)

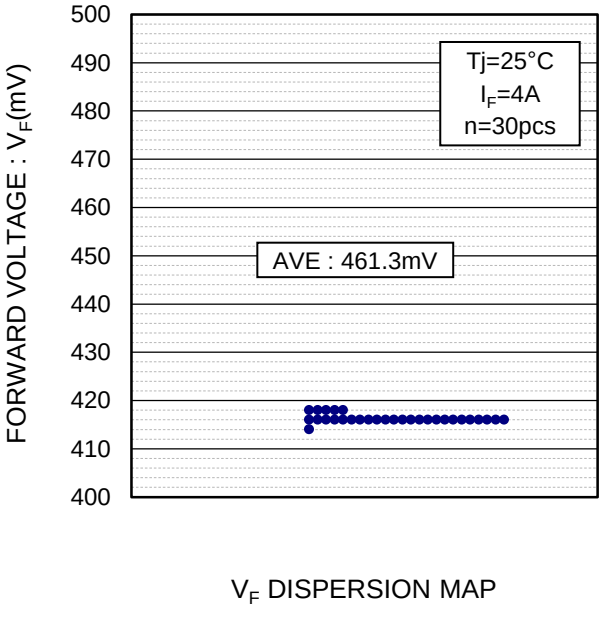
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | - | - | 0.48 | V | $I_F$=4.0A |
| Reverse current | $I_R$ | - | - | 0.3 | mA | $V_R$=30V |
| Thermal Resistance | $R_{th(j-c)}$ | - | - | 6.0 | °C / W | Junction to Case |

## ●Electrical characteristic curves

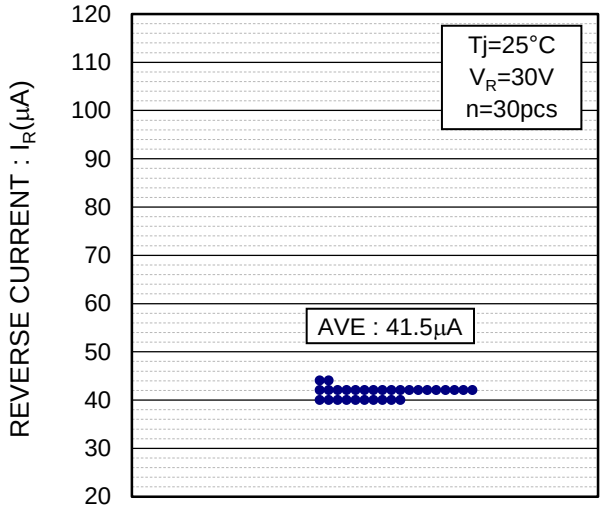


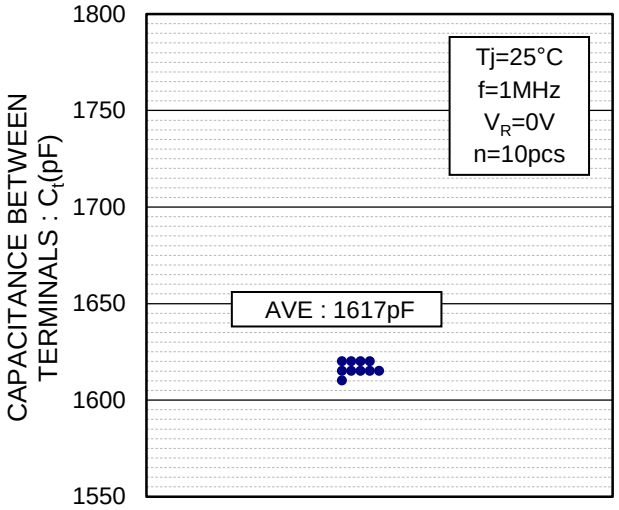



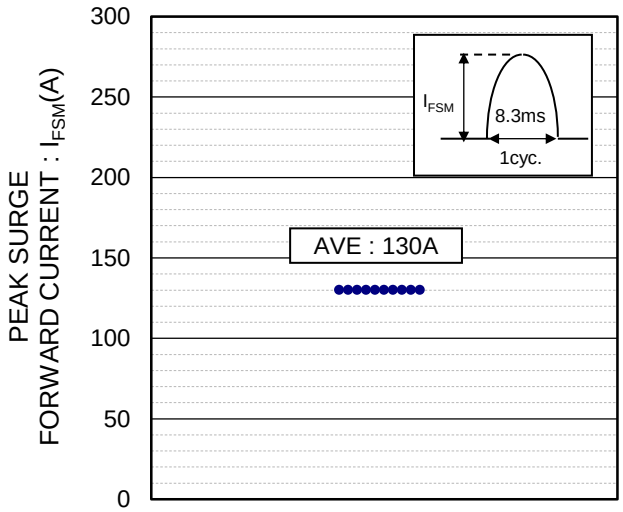
## ●Electrical characteristic curves



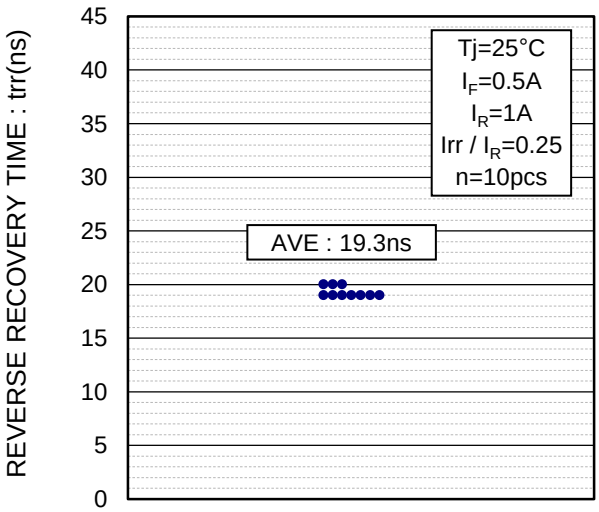

$I_R$ DISPERSION MAP




$C_t$ DISPERSION MAP

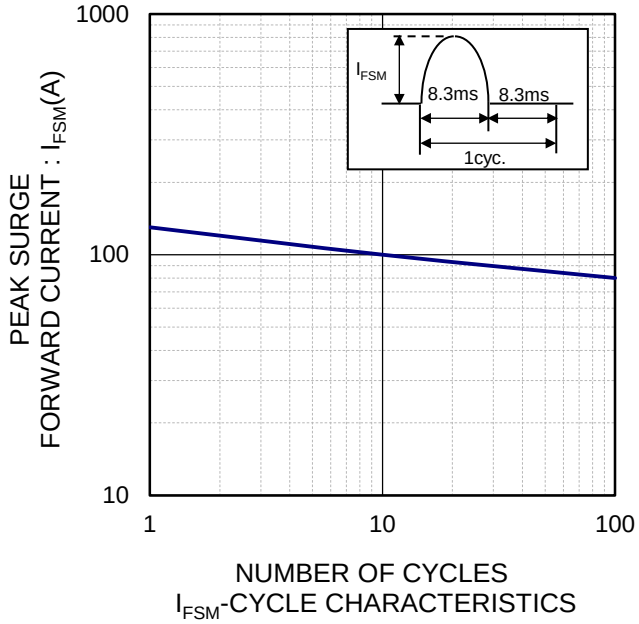


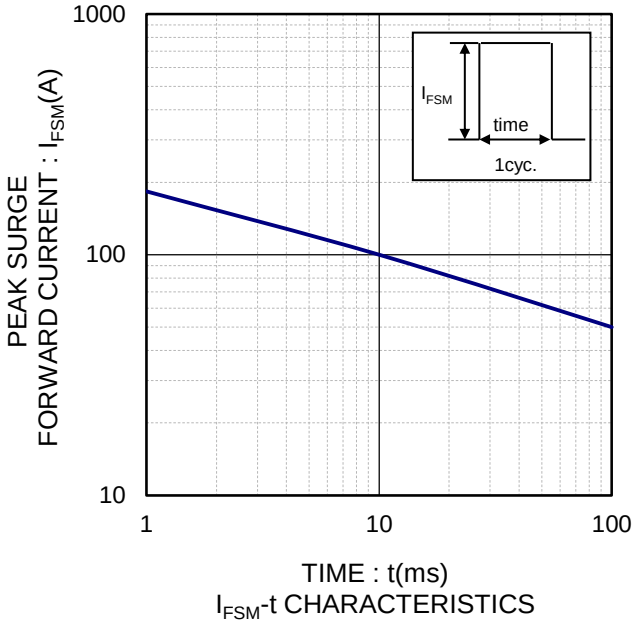

$I_{FSM}$ DISPERSION MAP

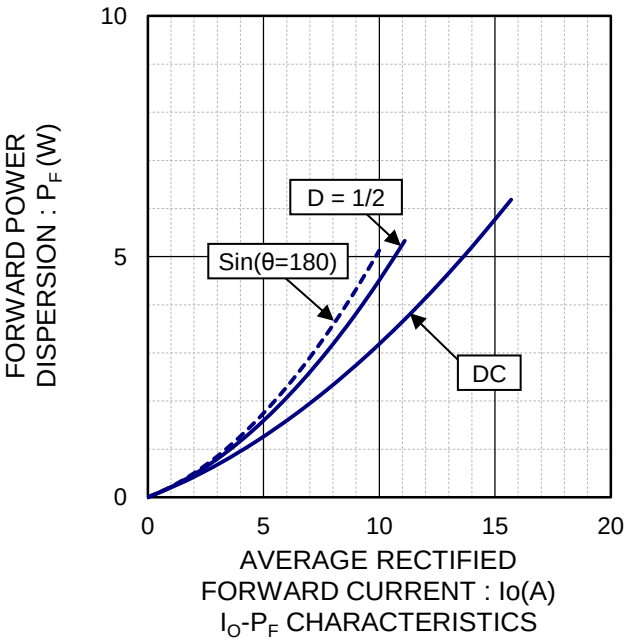


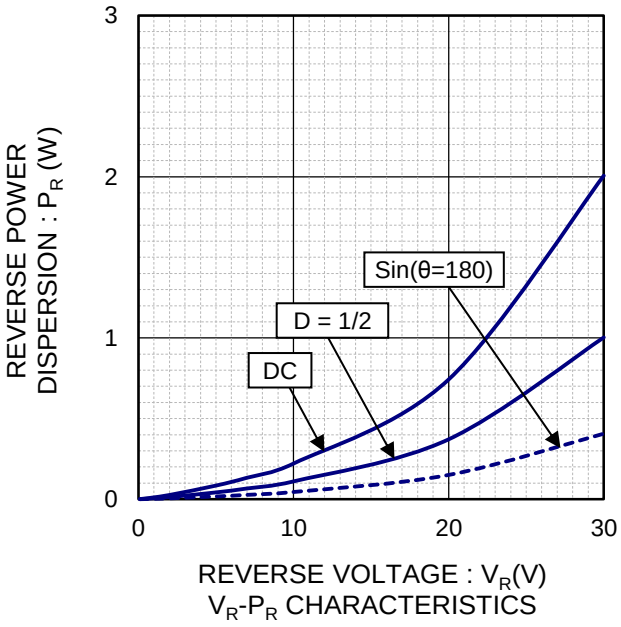

trr DISPERSION MAP

## ●Electrical characteristic curves

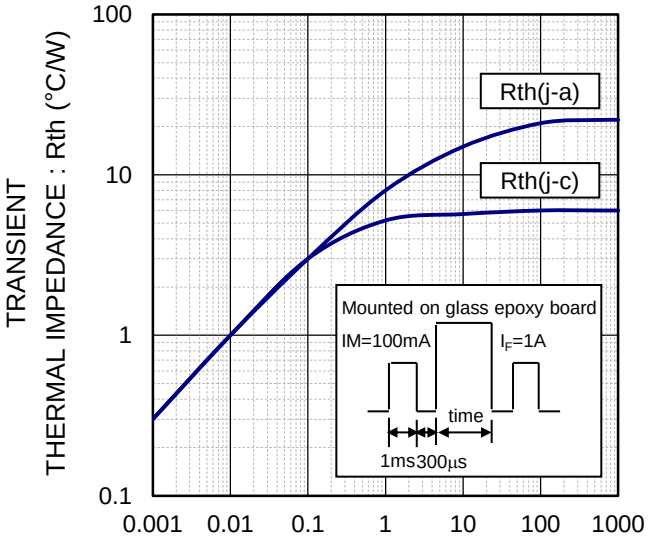


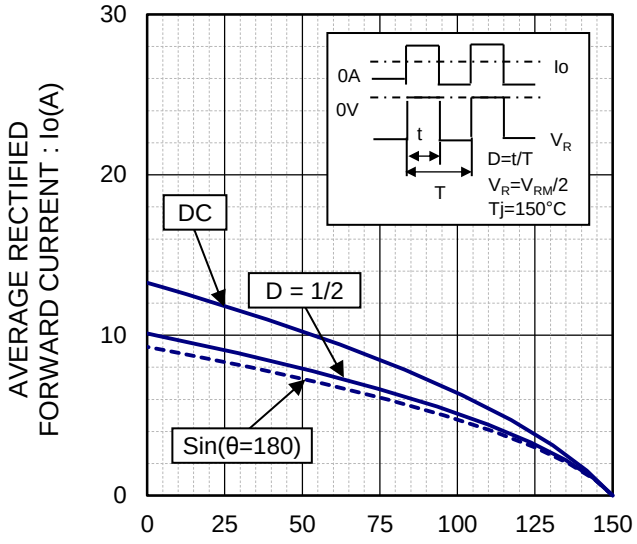



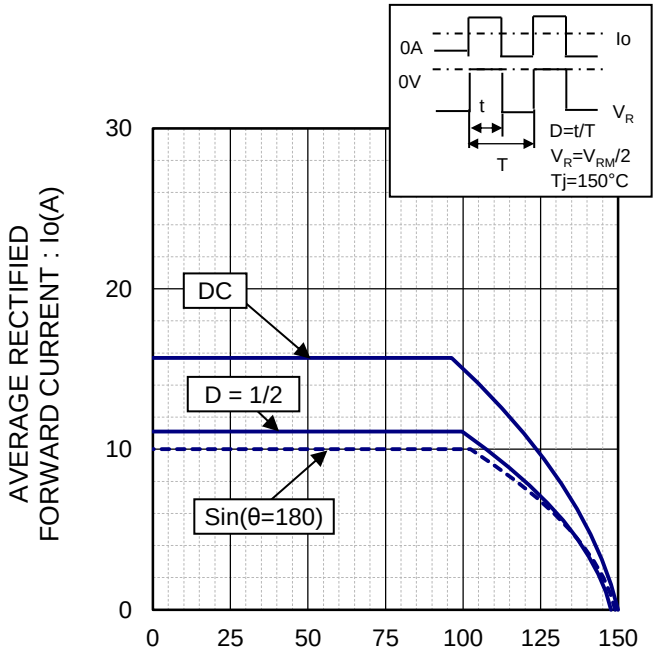
## ●Electrical characteristic curves



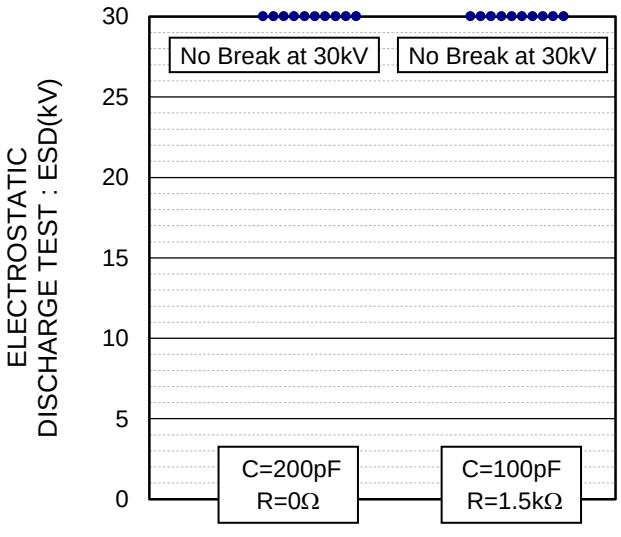

Rth-t CHARACTERISTICS




DERATING CURVE (Io-Ta)




DERATING CURVE (Io-Tc)




ESD DISPERSION MAP

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