

### ●Application

General Rectification

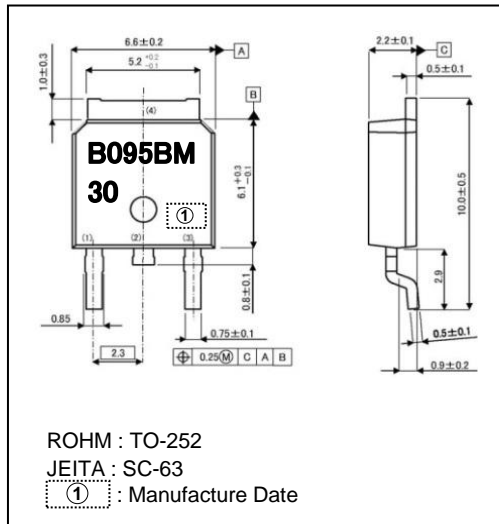
### ●Features

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

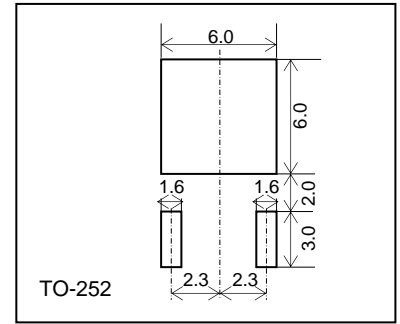
### ●Construction

Silicon epitaxial planar type

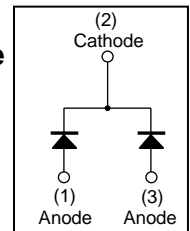
### ●Dimensions (Unit : mm)



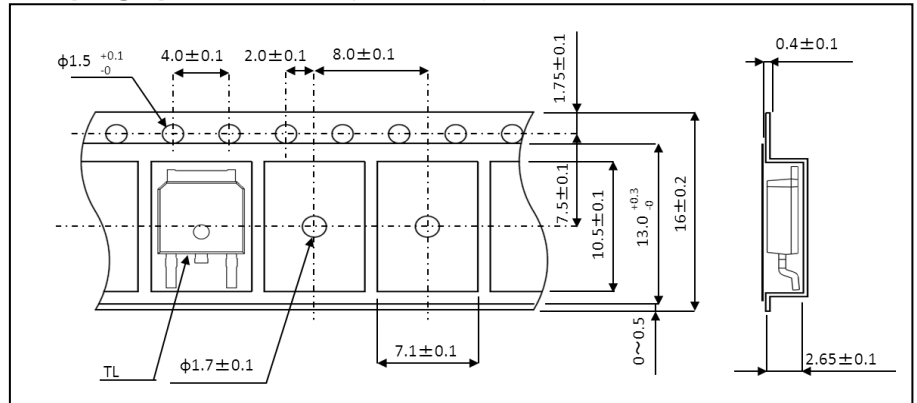
### ●Land size figure (Unit : mm)



### ●Structure



### ●Taping specifications (Unit : mm)



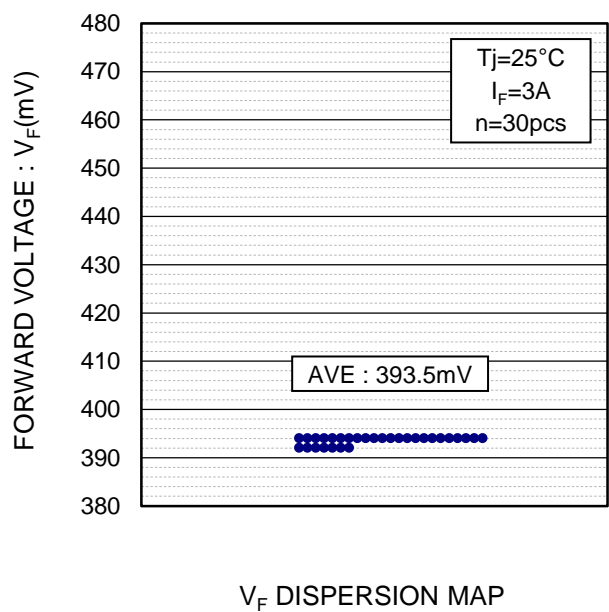
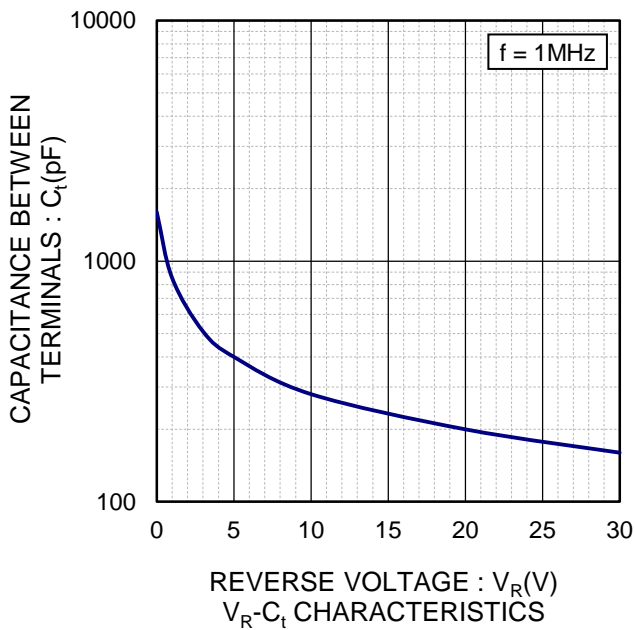
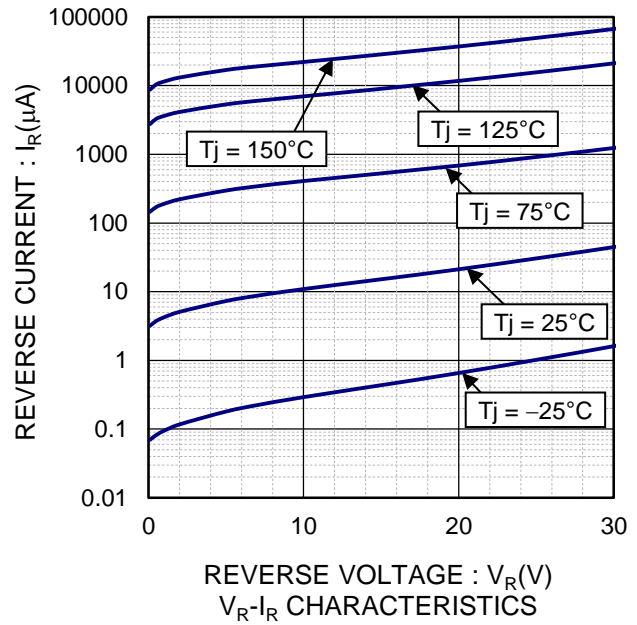
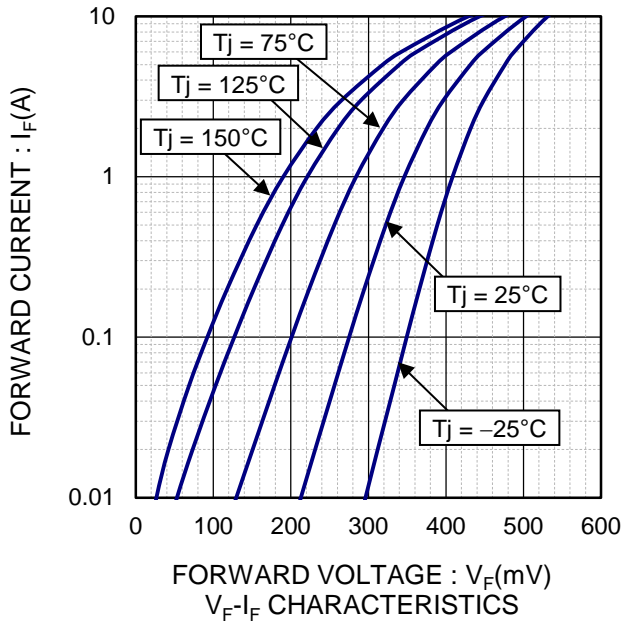
### ●Absolute maximum ratings ( $T_c=25^\circ\text{C}$ )

| Parameter                                 | Symbol    | Limits      | Unit             | Conditions  |
|---|-----------|-------------|------------------|---|
| Repetitive Peak Reverse Voltage           | $V_{RM}$  | 35          | V                | Duty $\leq 0.5$   |
| Reverse Voltage                           | $V_R$     | 30          | V                | Direct Reverse Voltage  |
| Average forward rectified current         | $I_o$     | 6           | A                | 60Hz half sin Wave resistive load,<br>$T_c=134^\circ\text{C}$ max., 1/2 $I_o$ per diode |
| Non-repetitive Forward Current Surge Peak | $I_{FSM}$ | 50          | A                | 60Hz half sin wave,<br>Non-repetitive at $T_a=25^\circ\text{C}$ , per diode             |
| Operating Junction Temperature            | $T_j$     | 150         | $^\circ\text{C}$ | -   |
| Storage Temperature                       | $T_{stg}$ | -40 to +150 | $^\circ\text{C}$ | -   |

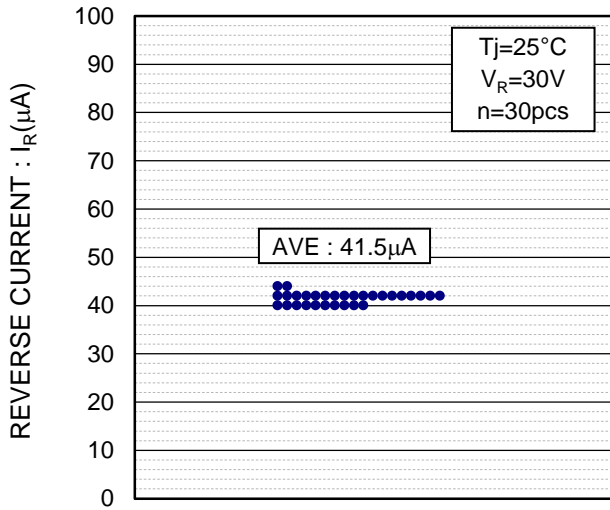
### ●Electrical characteristics ( $T_j = 25^\circ\text{C}$ )

| Parameter          | Symbol        | Min. | Typ. | Max.  | Unit                        | Conditions        |
|--------------------|---------------|------|------|-------|-----------------------------|-------------------|
| Forward voltage    | $V_F$         | -    | -    | 0.425 | V                           | $I_F=3.0\text{A}$ |
| Reverse current    | $I_R$         | -    | -    | 0.2   | mA                          | $V_R=30\text{V}$  |
| Thermal Resistance | $R_{th(j-c)}$ | -    | -    | 6.0   | $^\circ\text{C} / \text{W}$ | Junction to Case  |

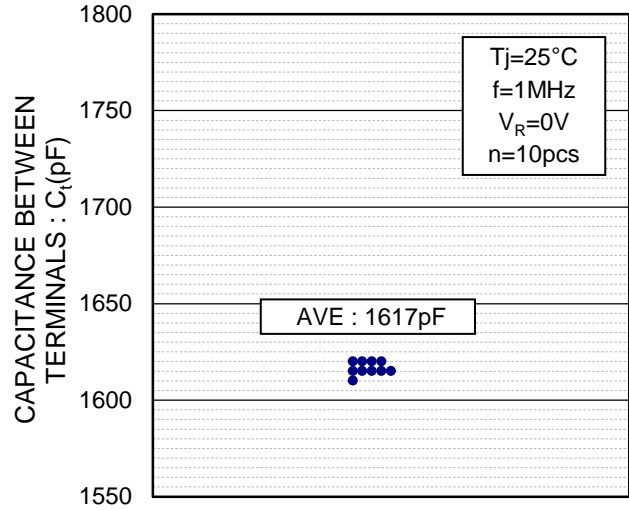
●Electrical characteristic curves



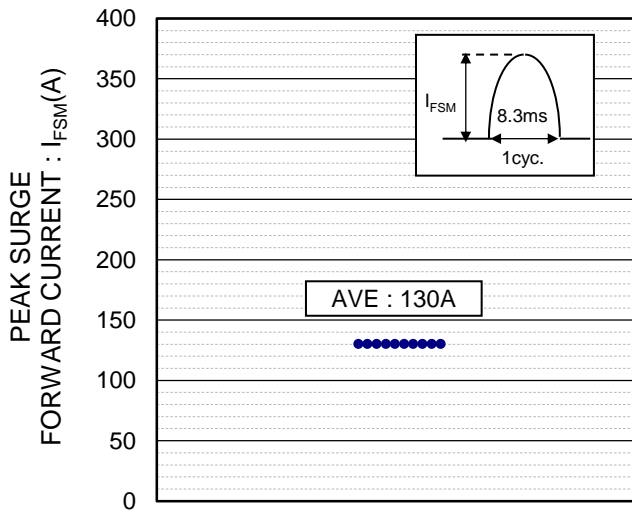
●Electrical characteristic curves



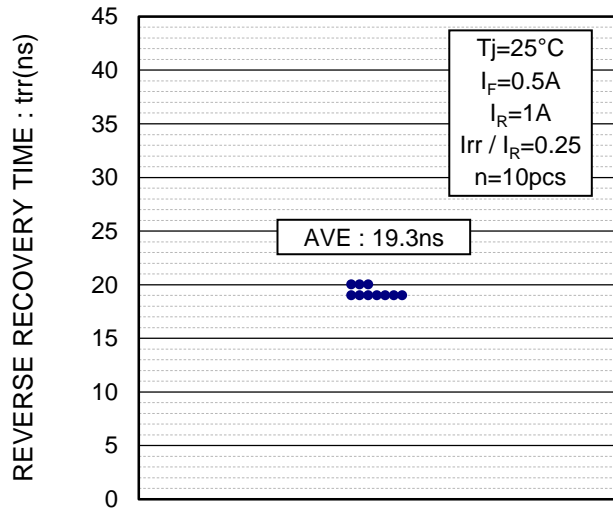
$I_R$  DISPERSION MAP



$C_t$  DISPERSION MAP

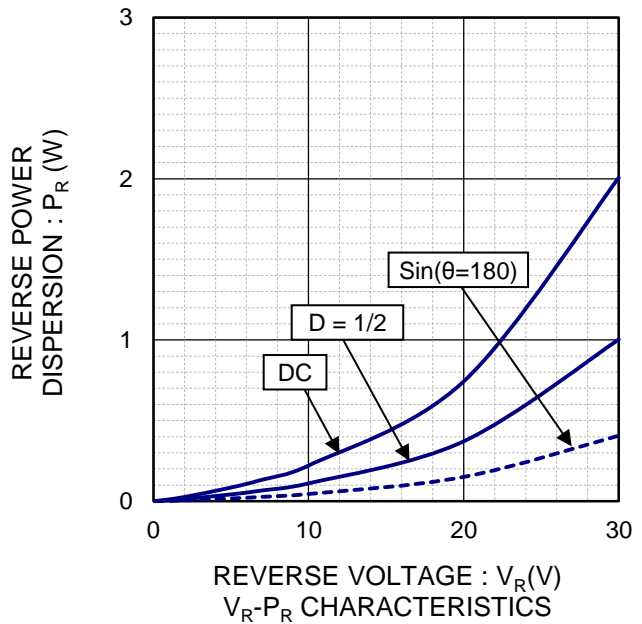
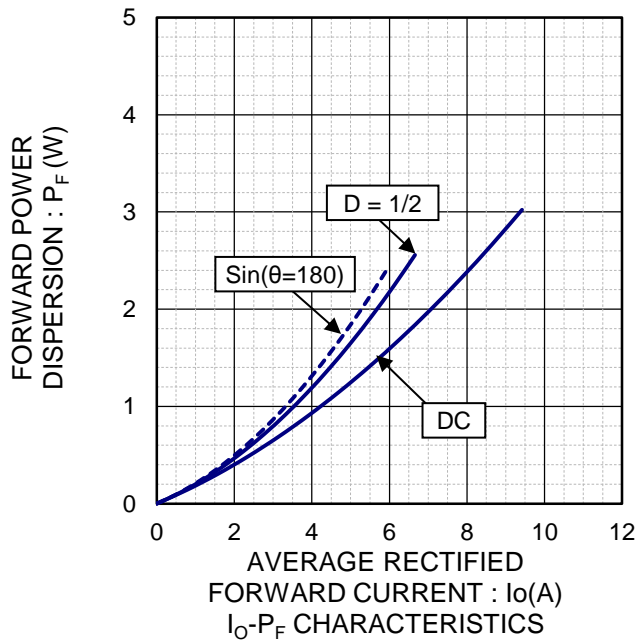
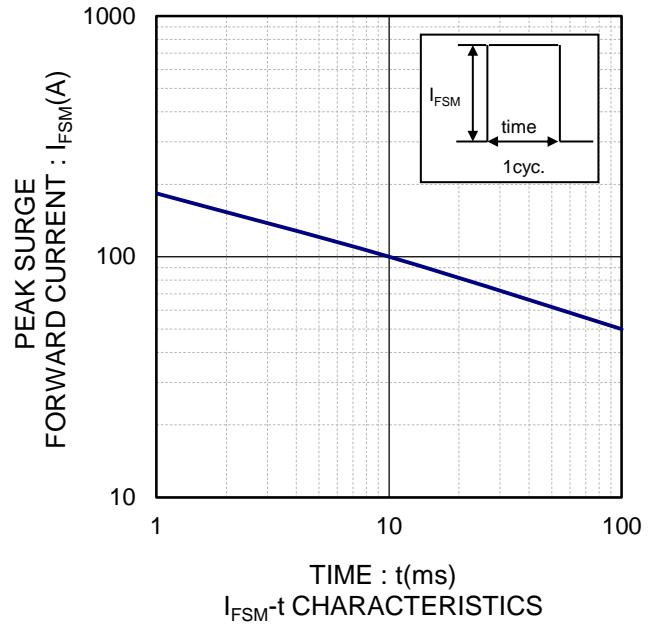
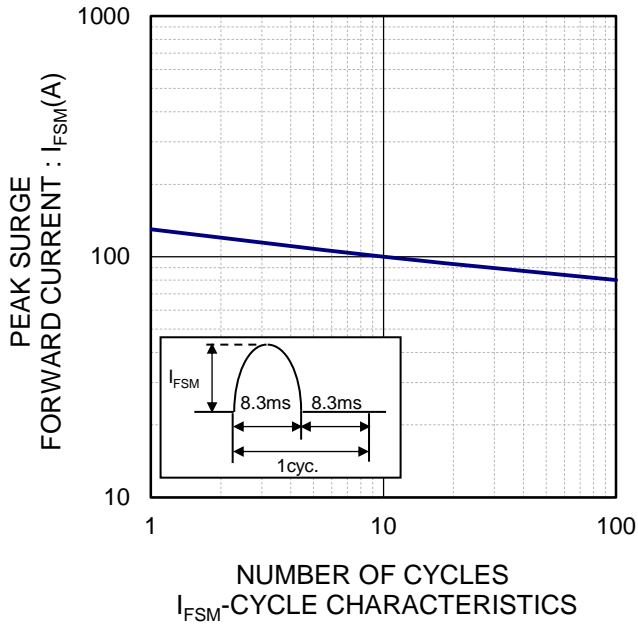


$I_{FSM}$  DISPERSION MAP

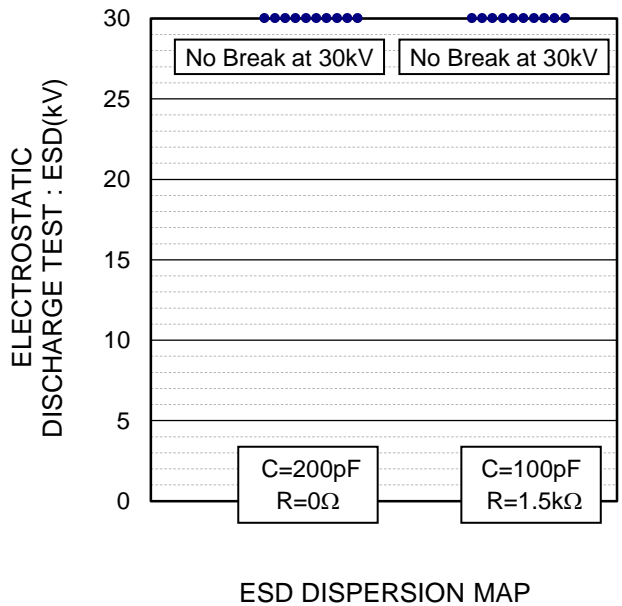
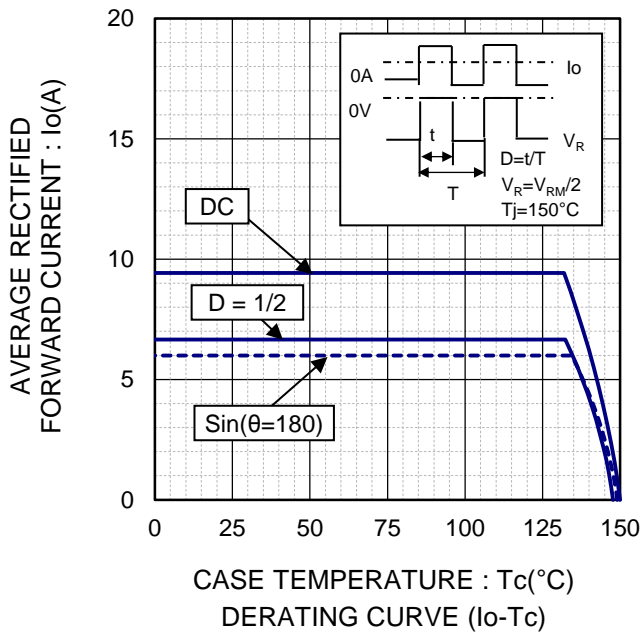
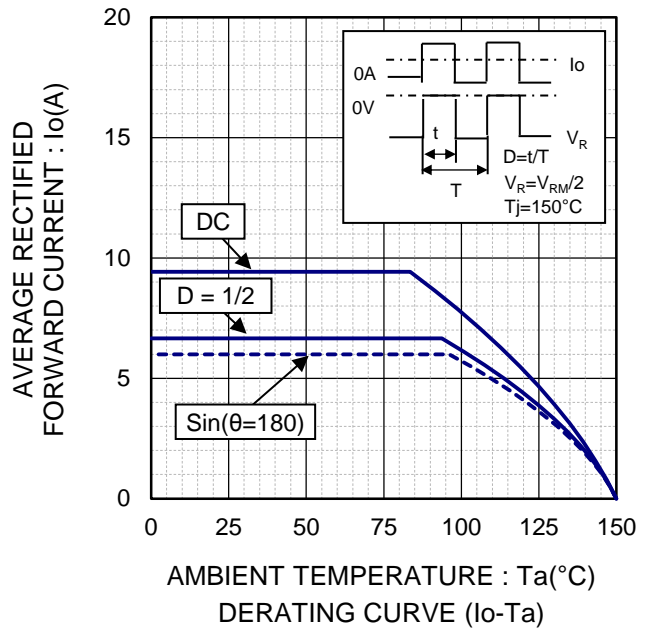
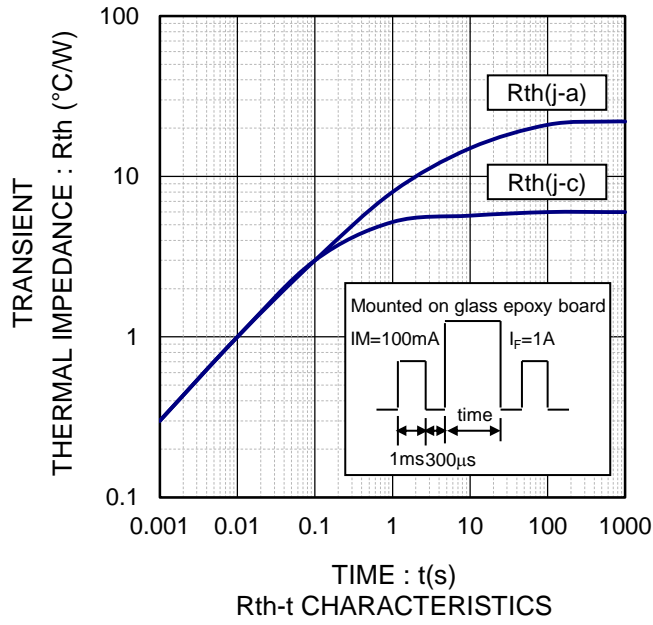


$t_{tr}$  DISPERSION MAP

●Electrical characteristic curves



●Electrical characteristic curves



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