

AEC-Q101 Qualified

●Series

Standard Fast Recovery

●Application

General rectification

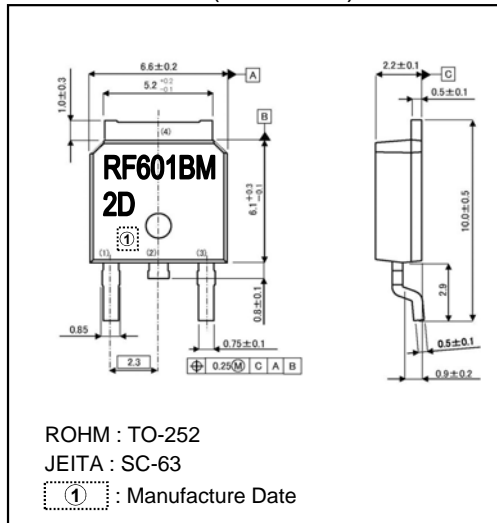
●Features

- 1) Cathode common dual type
- 2) Low switching loss
- 3) Low forward voltage

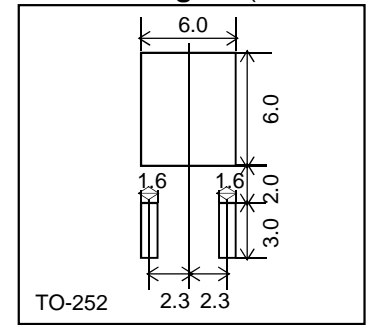
●Construction

Silicon epitaxial planar type

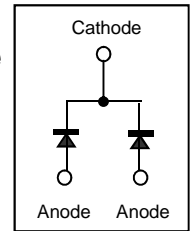
●Dimensions (Unit : mm)



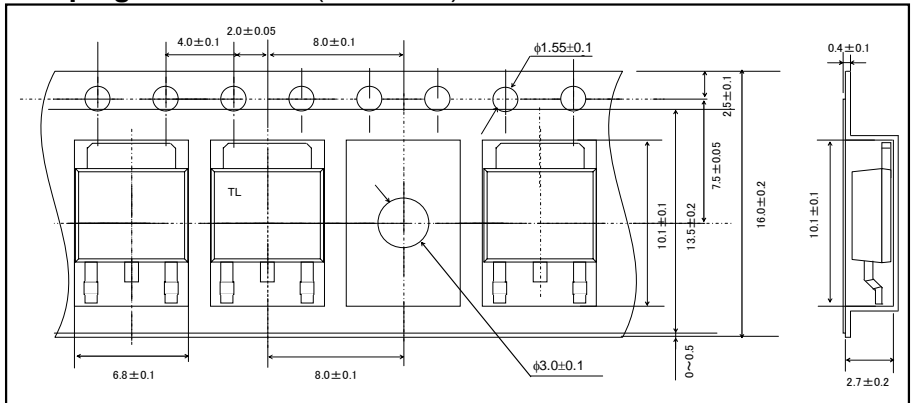
●Land Size Figure (Unit : mm)



●Structure



●Taping Dimensions (Unit : mm)



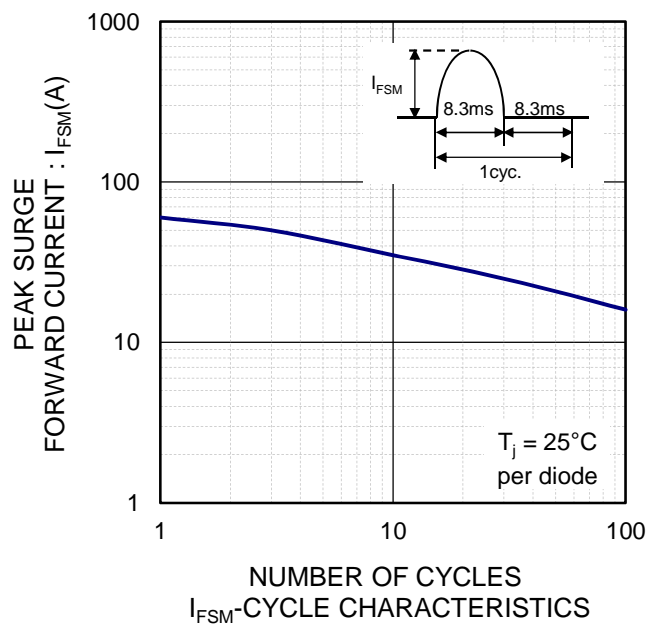
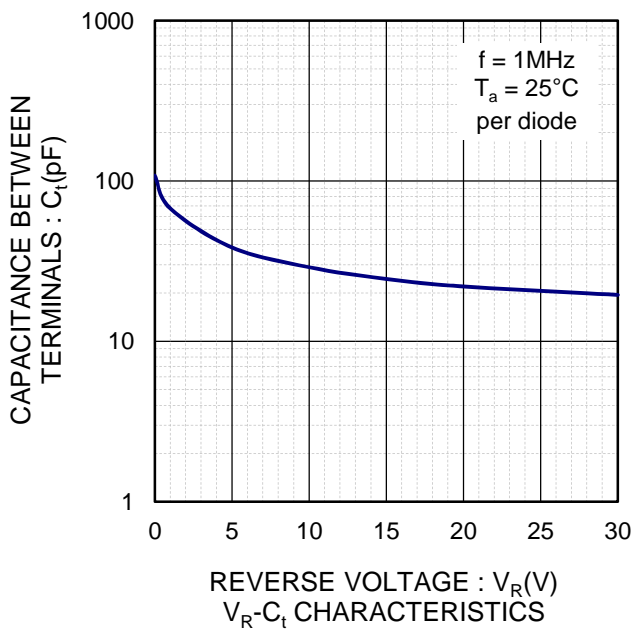
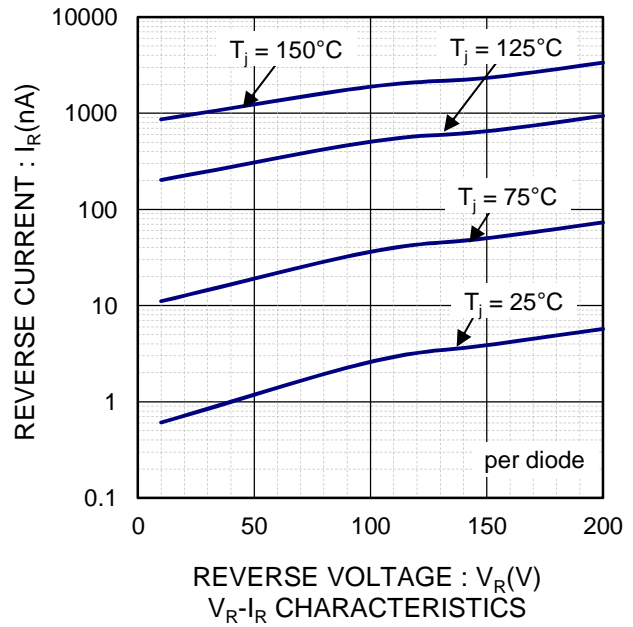
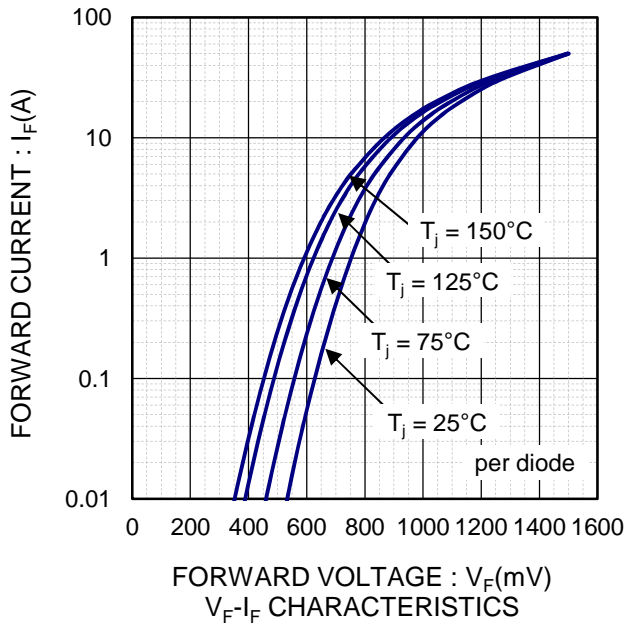
●Absolute Maximum Ratings ($T_c = 25^\circ\text{C}$)

| Parameter | Symbol | Conditions | Limits | Unit |
|-----------------------------------|-----------|---|--------------------------------|------------------|
| Repetitive peak reverse voltage | V_{RM} | Duty ≤ 0.5 | 200 | V |
| Reverse voltage | V_R | Direct voltage | 200 | V |
| Average rectified forward current | I_o | 60Hz half sin wave, Resistive load 1/2 I_o per diode | $T_c = 109^\circ\text{C}$ 6 | A |
| Forward current surge peak | I_{FSM} | 60Hz half sin wave, Non-repetitive at $T_j = 25^\circ\text{C}$, per diode | 60 | A |
| Operating junction temperature | T_j | - | 150 | $^\circ\text{C}$ |
| Storage temperature | T_{stg} | - | -55 to +150 | $^\circ\text{C}$ |

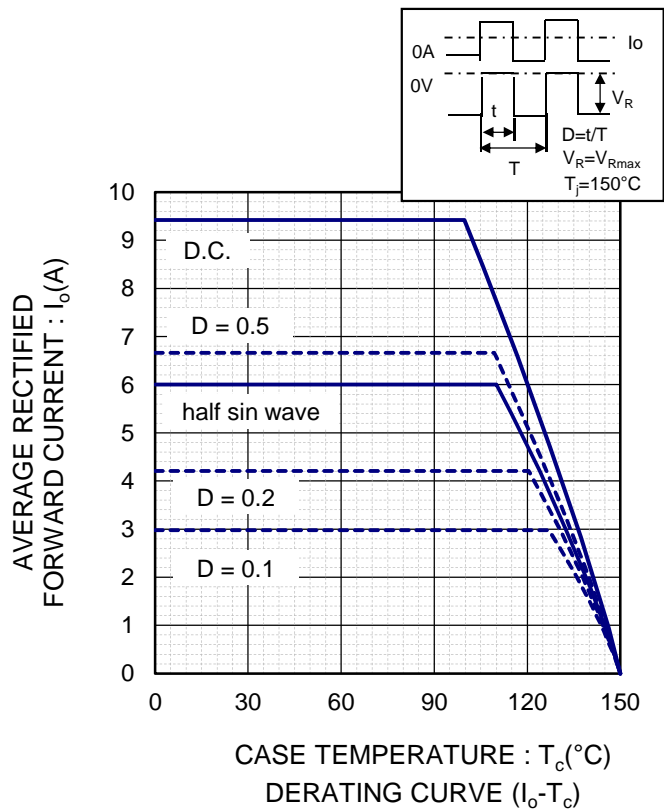
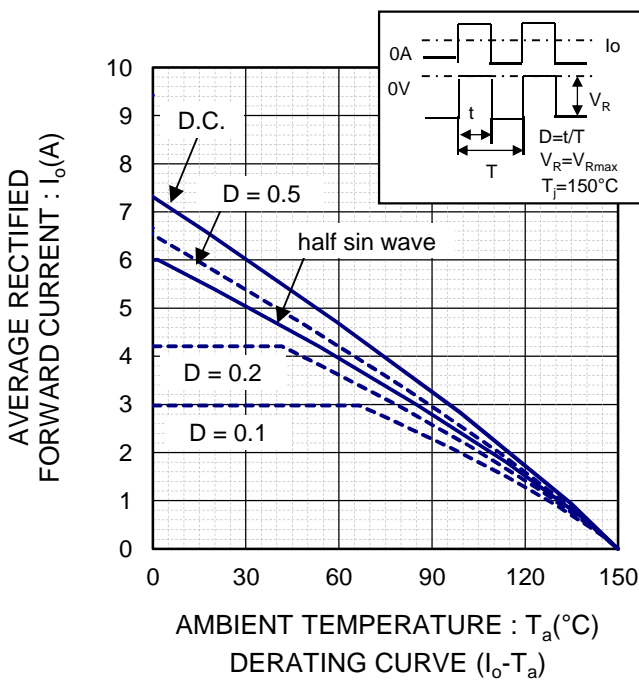
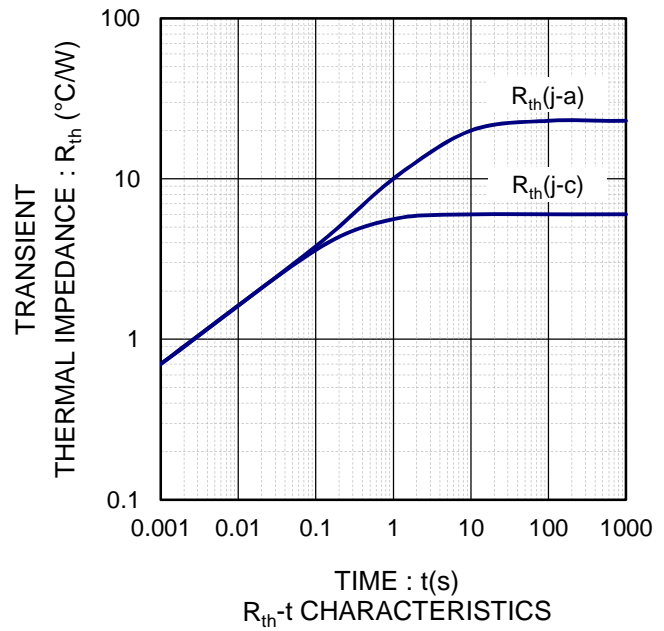
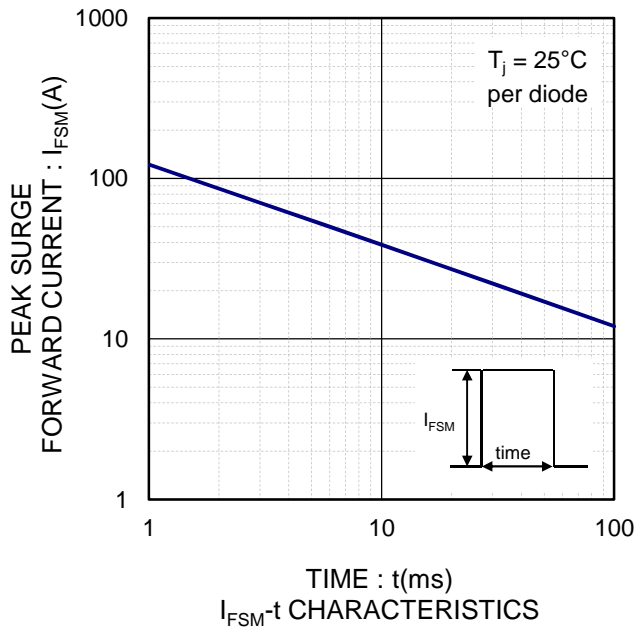
●Electrical Characteristics ($T_j = 25^\circ\text{C}$, per diode)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------|---------------|--|------|------|------|-----------------------------|
| Forward voltage | V_F | $I_F = 3\text{A}$ | - | 0.87 | 0.93 | V |
| Reverse current | I_R | $V_R = 200\text{V}$ | - | 0.05 | 10 | μA |
| Reverse recovery time | t_{rr} | $I_F = 0.5\text{A}$, $I_R = 1\text{A}$, $I_{rr} = 0.25 \times I_R$ | - | 14 | 25 | ns |
| Thermal resistance | $R_{th(j-c)}$ | Junction to case | - | - | 6.0 | $^\circ\text{C} / \text{W}$ |

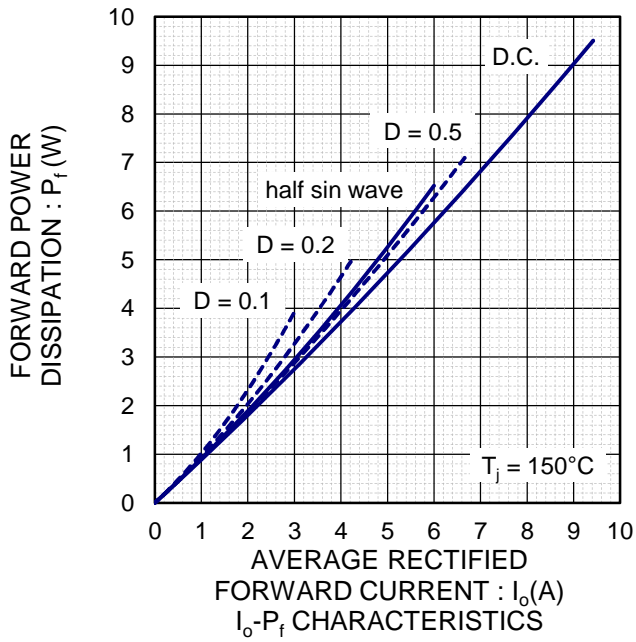
●Electrical Characteristic Curves



●Electrical Characteristic Curves



●Electrical Characteristic Curves



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