

Fast recovery diode

RF071M2S

●Applications

High frequency rectification

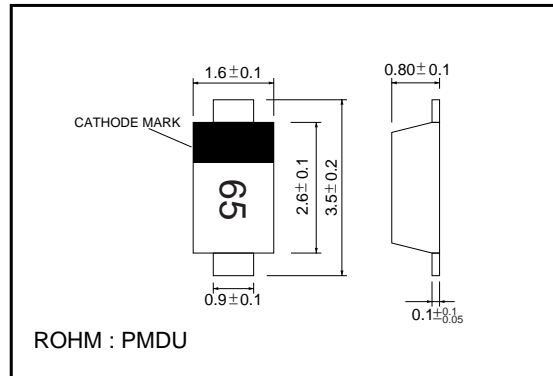
●Features

- 1) Small power mold type (PMDS)
- 2) Ultra low V_F
- 3) Very fast recovery
- 4) Low switching loss

●Construction

Silicon epitaxial planar

●External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|---|-----------|-------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 200 | V |
| Reverse voltage (DC) | V_R | 200 | V |
| Forward voltage (DC) | I_F * | 1.0 | A |
| Average rectified forward current | I_o * | 0.7 | A |
| Forward peak surge current (60Hz · 1cyc.) | I_{FSM} | 15 | A |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -55 to +150 | °C |

* Mounting on glass epoxy board

●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-----------------------|----------|------|-------|----------|------|--|
| Forward voltage | V_F | – | 0.790 | 0.850 | V | $I_F=0.7A$ |
| Reverse current | I_R | – | 10n | 10 μ | A | $V_R=200V$ |
| Reverse recovery time | t_{rr} | – | ns | 25 | ns | $I_F=0.5A, I_R=1.0A, I_{rr}=0.25 \times I_R$ |

Note) ESD sensitive product handling required.

Diodes

●Electrical characteristic curves (Ta=25°C)

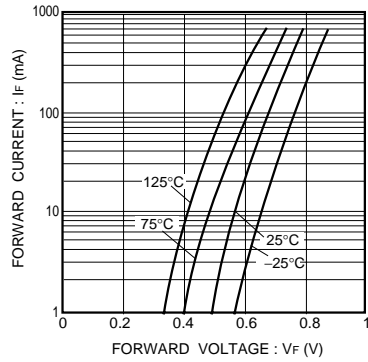


Fig.1 Forward temperature characteristics

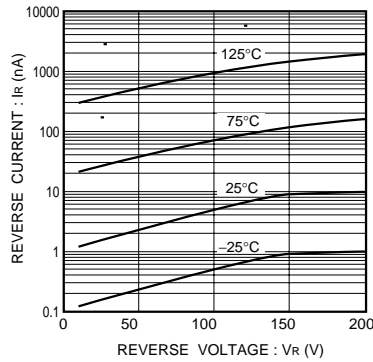


Fig.2 Reverse temperature characteristics

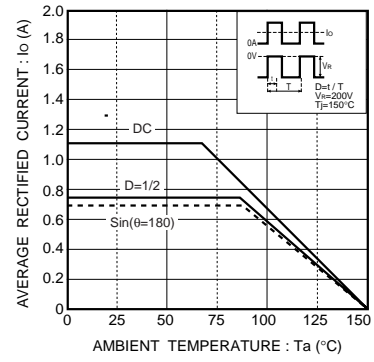


Fig.3 Derating curve

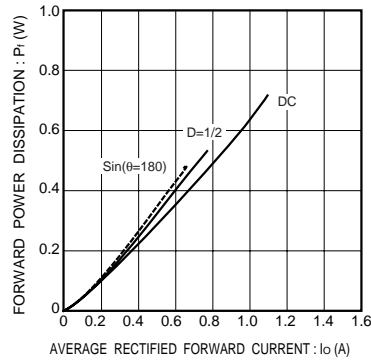


Fig. 4 Power dissipation characteristics

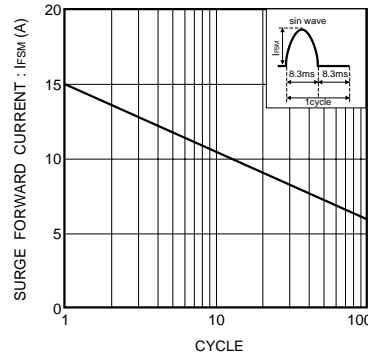


Fig.5 Forward peak surge current

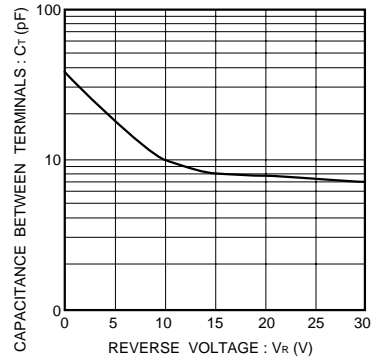


Fig. 6 Capacitance between terminals characteristics

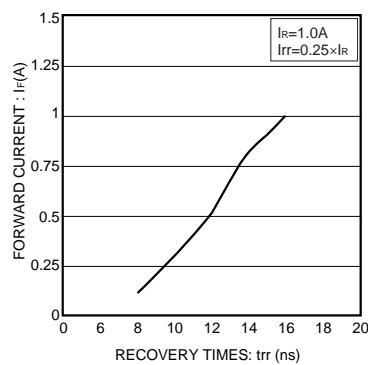


Fig. 7 Reverse recovery time

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