

Shottky barrier diode

RSX051VA-30

●Application

General rectification.

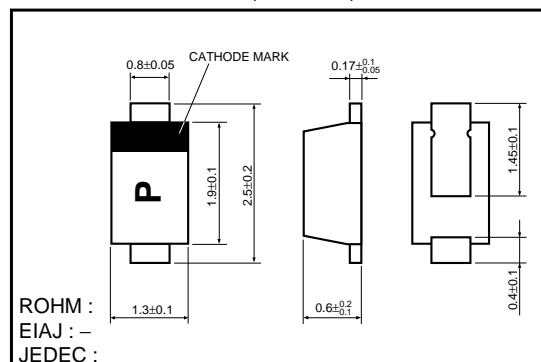
●Features

- 1) Small power mold type. (TUMD2 (1913))
- 2) High reliability.
- 3) Low V_F / Low I_R . (0.35V at 0.7A / 40 μ A at 30V)

●Structure

Silicon Epitaxial Planer

●External dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|-------------------------------------------|-----------|------------|------|
| Reverse voltage (repetitive peak) | V_{RM} | 30 | V |
| Reverse voltage (DC) | V_R | 30 | V |
| Average rectified forward current | I_o | 0.5 | A |
| Forward current surge peak (60Hz / 1cyc.) | I_{FSM} | 5 | A |
| Junction temperature | T_j | 150 | °C |
| Storage temperature | T_{stg} | -40 to 150 | °C |

●Electrical characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|-------------------------------|----------|------|------|------|---------|-------------------|
| Forward voltage | V_{F1} | — | 0.35 | 0.39 | V | $I_F=0.5A$ |
| Reverse current | I_{R2} | — | 40 | 200 | μA | $V_R=30V$ |
| Capacitance between terminals | C_T | — | 30 | — | pF | $V_R=10V, f=1MHz$ |

Diodes

●Electrical characteristic curves (Ta=25°C)

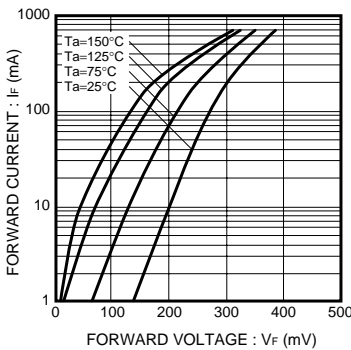


Fig.1 Forward Temperature Characteristics

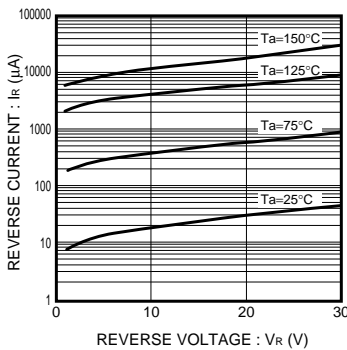


Fig.2 Reverse Temperature Characteristics

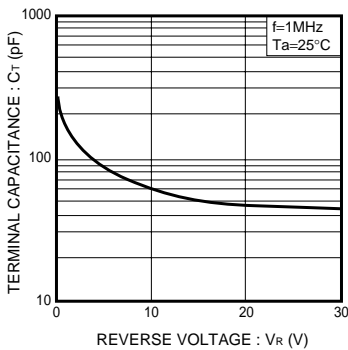


Fig.3 Capacitance Between Terminals Characteristics

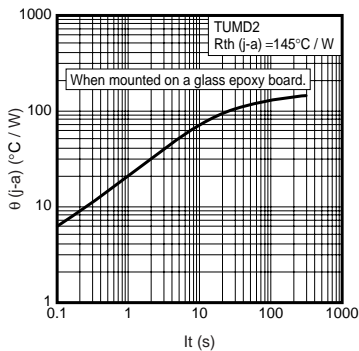


Fig.4

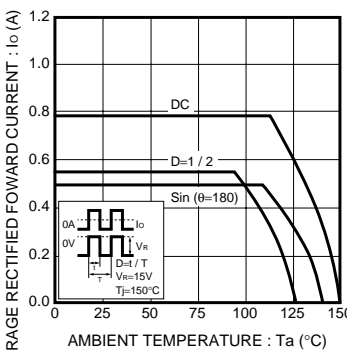


Fig.5 Derating Curve (Io-Ta)

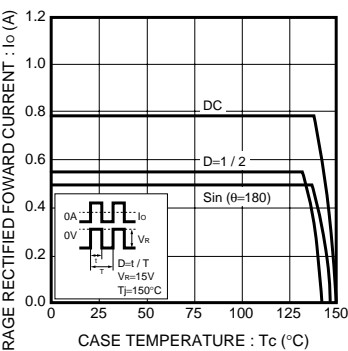


Fig.6 Derating Curve (Io-Tc)

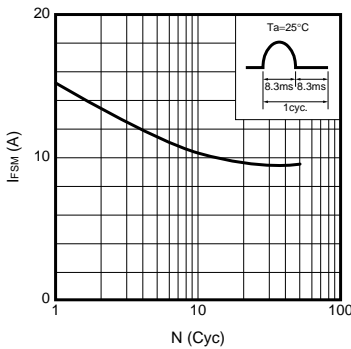


Fig.7

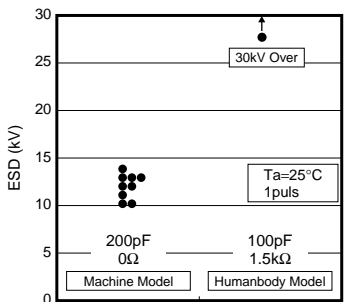


Fig.8 ESD

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