# Shottky barrier diode

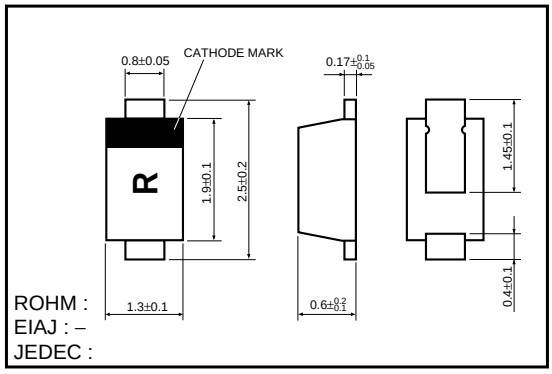
## RSX101VA-30

●**Application**
General rectification.

●**Features**
1) Small power mold type. (TUMD2 (1913) )
2) High reliability.
3) Low $V_F$ / Low $I_R$. (0.43V at 1A / 40μA 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 | $I_O$ | 1 | A |
| Forward current surge peak (60Hz / 1cyc.) | $I_{FSM}$ | 5 | A |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | –40 to 150 | °C |

●**Electrical characteristics** (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Conditions |
|---|---|---|---|---|---|---|
| Forward voltage | $V_F$ | – | 0.43 | 0.47 | V | $I_F$=1.0A |
| Reverse current | $I_{R1}$ | – | 15 | 40 | μA | $V_R$=5V |
| | $I_{R2}$ | – | 40 | 200 | μA | $V_R$=30V |
| Capacitance between terminals | $C_T$ | – | 30 | – | pF | $V_R$=10V, f=1MHz |

●**Electrical characteristic curves** (Ta=25°C)

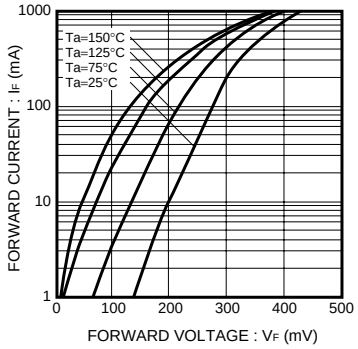



Fig.1 Forward Temperature Characteristics

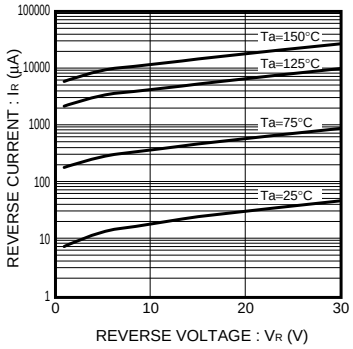



Fig.2 Reverse Temperature Characteristics

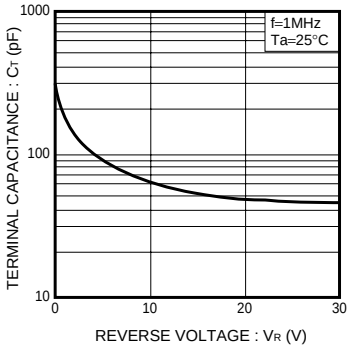



Fig.3 Capacitance Between Terminals Characteristics

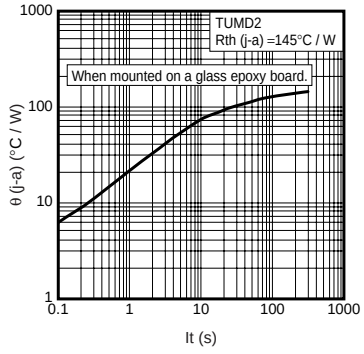



Fig.4

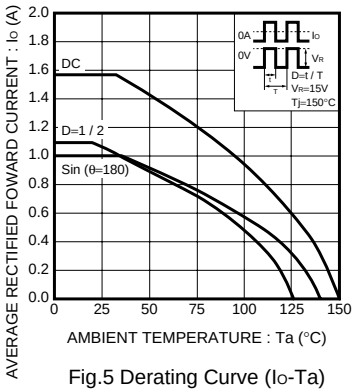



Fig.5 Derating Curve ($I_O$-Ta)

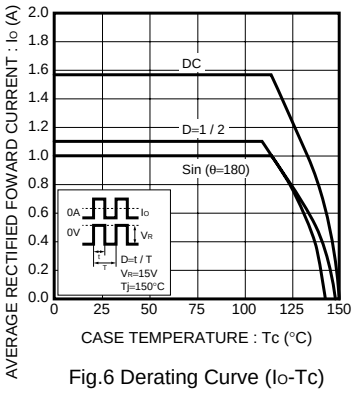



Fig.6 Derating Curve ($I_O$-Tc)

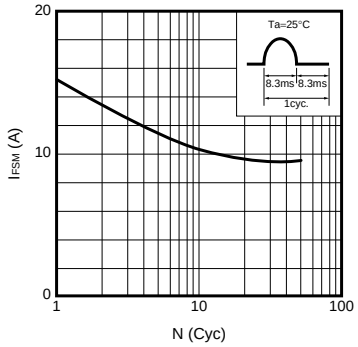



Fig.7

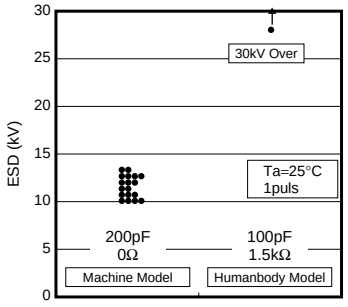



Fig.8 ESD resistance

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