

Shottky barrier diode

RSX051VA-30

●Application

General rectification.

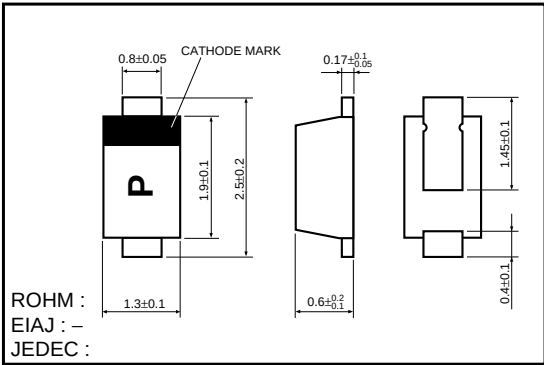
●Features

- 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	$V_R=10V, f=1MHz$

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●Electrical characteristic curves (Ta=25°C)

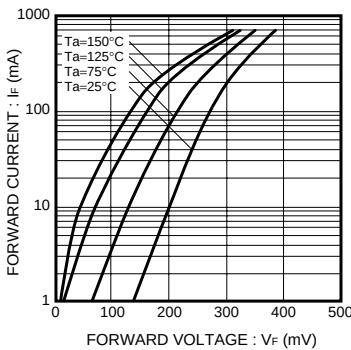


Fig.1 Forward Temperature Characteristics

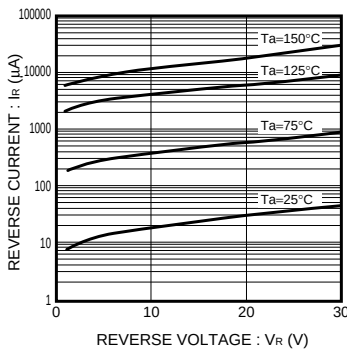


Fig.2 Reverse Temperature Characteristics

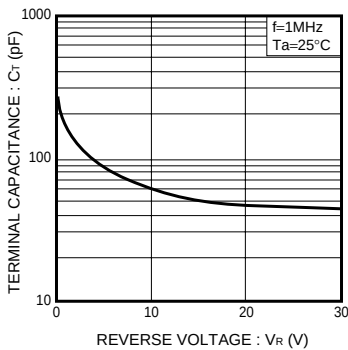


Fig.3 Capacitance Between Terminals Characteristics

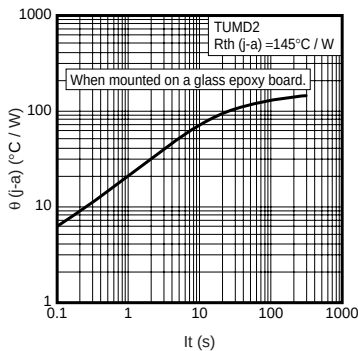


Fig.4

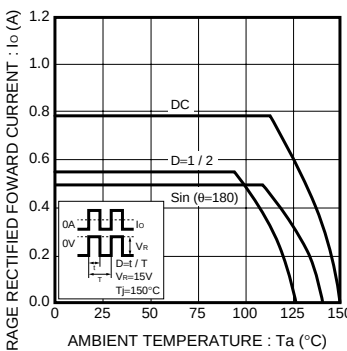


Fig.5 Derating Curve (Io-Ta)

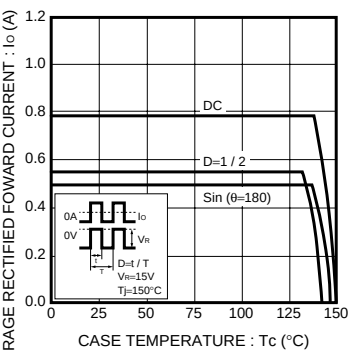


Fig.6 Derating Curve (Io-Tc)

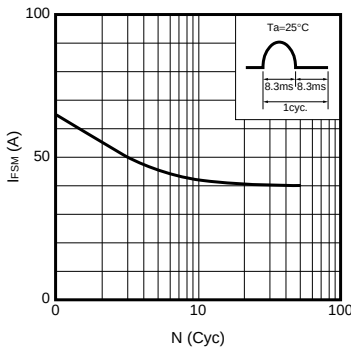


Fig.7

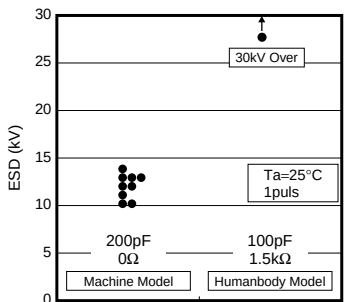


Fig.8 ESD