

Shottky barrier diode

RSX501L-20

●Application

General rectification.

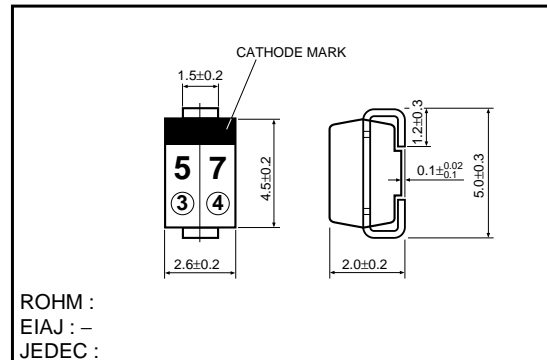
●Features

- 1) Small power mold type. (PMDS)
- 2) High reliability.
- 3) Low V_F .

●Structure

Silicon Epitaxial Planer

●External dimensions (Unit : mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	25	V
Reverse voltage (DC)	V_R	20	V
Average rectified forward current	I_O	5	A *
Forward current surge peak (60Hz / 1cyc.)	I_{FSM}	70	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to 125	$^\circ\text{C}$

*On the Glass epoxy substrate, 180° Half sine wave, $T_c=90^\circ\text{C}$ MAX.

●Electrical characteristics ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.39	V	$I_F=3.0\text{A}$
Reverse current	I_R	-	-	500	μA	$V_R=20\text{V}$

Diodes

●Electrical characteristic curves (Ta=25°C)

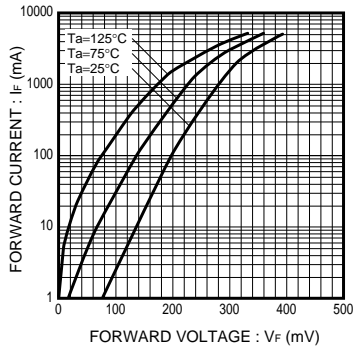


Fig.1 Forward Temperature Characteristics

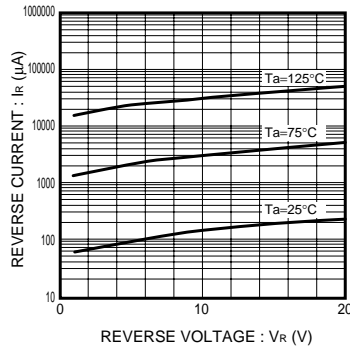


Fig.2 Reverse Temperature Characteristics

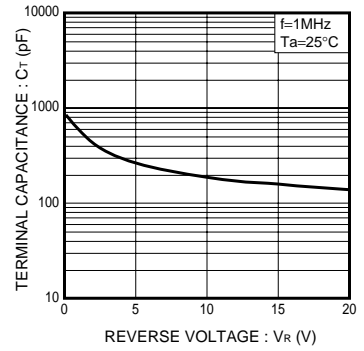


Fig.3 Capacitance Between Terminals Characteristics

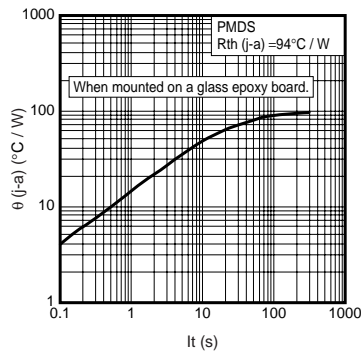


Fig.4

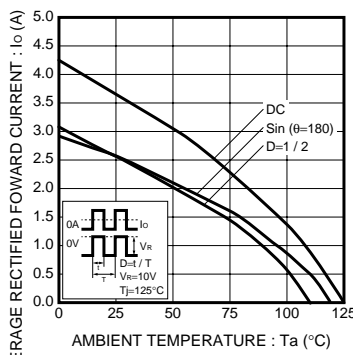


Fig.5 Derating Curve (Io-Ta)

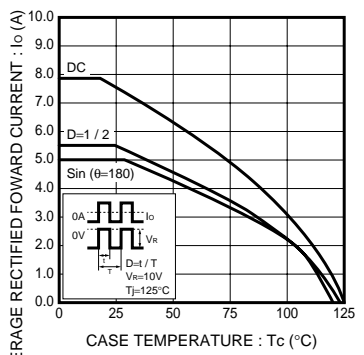


Fig.6 Derating Curve (Io-Tc)

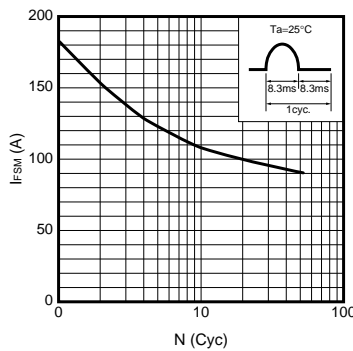


Fig.7

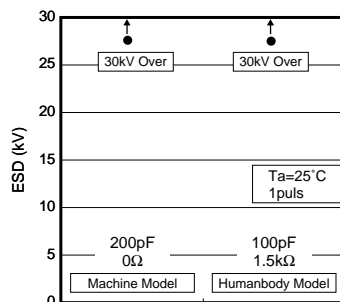


Fig.8 ESD