

Shottky barrier diode

RSX301LA-30

●Application

General rectification.

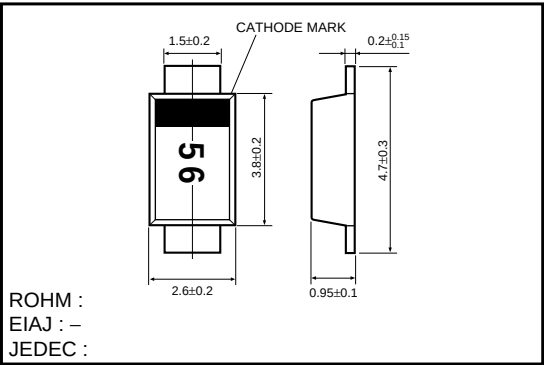
●Features

- 1) Small and Thin power mold type (PMDT).
- 2) High reliability.
- 3) Low V_F , Low I_R .

●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	3.0	A *
Forward current surge peak (60Hz / 1cyc.)	I_{FSM}	70	A
Junction temperature	T_j	150	°C
Storage temperature	T_{stg}	–40 to 150	°C

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

●Electrical characteristics (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	–	–	0.42	V	$I_F=3.0\text{A}$
Reverse current	I_{R1}	–	–	90	μA	$V_R=15\text{V}$
	I_{R2}	–	–	200	μA	$V_R=30\text{V}$

Diodes

●Electrical characteristic curves (Ta=25°C)

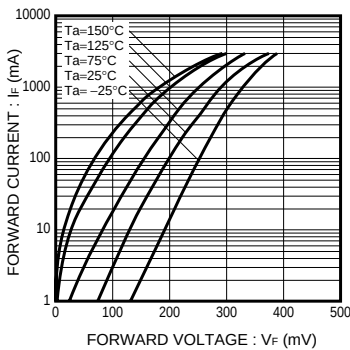


Fig.1 Forward Temperature Characteristics

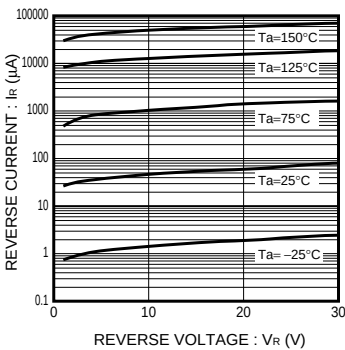


Fig.2 Reverse Temperature Characteristics

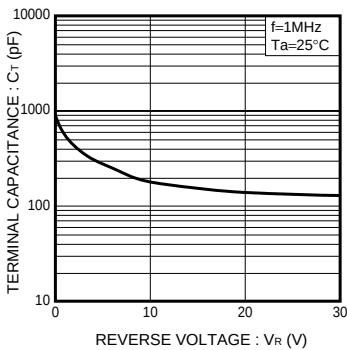


Fig.3 Capacitance Between Terminals Characteristics

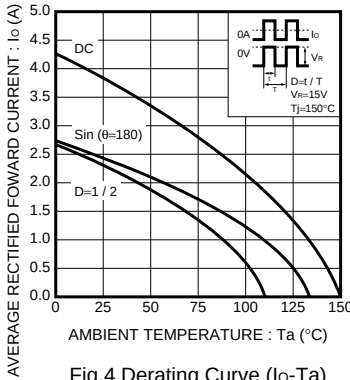


Fig.4 Derating Curve (Io-Ta)

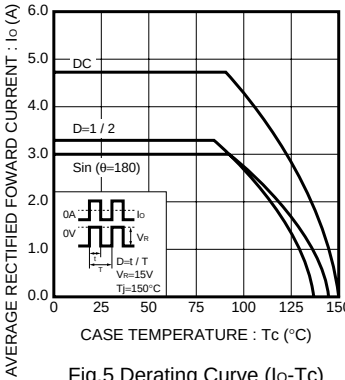


Fig.5 Derating Curve (Io-Tc)

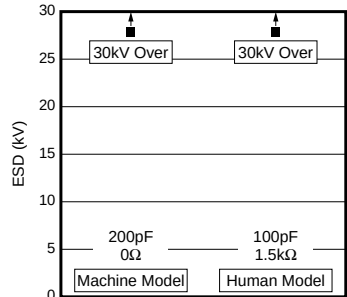


Fig.6 ESD