

# Schottky barrier diode

RSX501LA-20

●Applications

General rectification

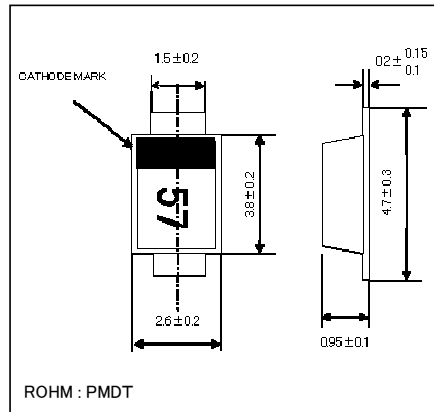
●Features

- 1) Small and Thin power mold type (PMDT)
- 2) High reliability.
- 3) Low I<sub>R</sub>

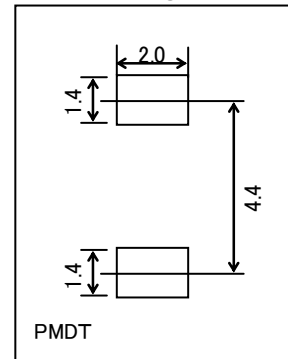
●Structure

Silicon epitaxial planar

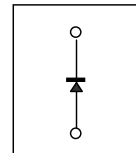
●Dimensions (Unit : mm)



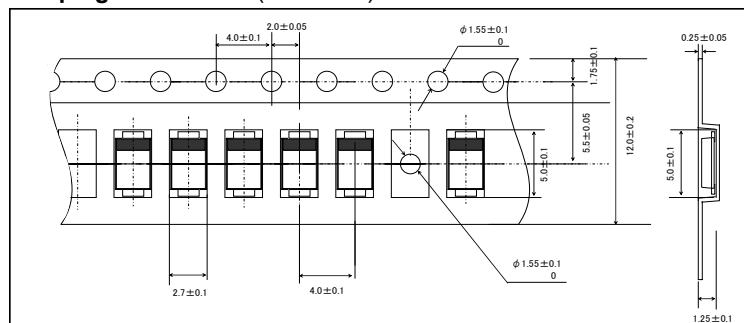
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

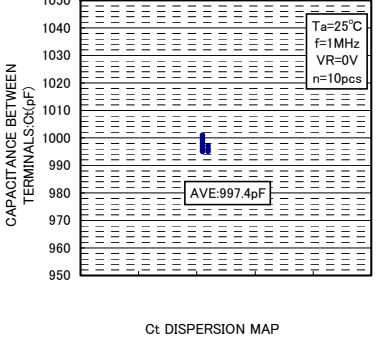
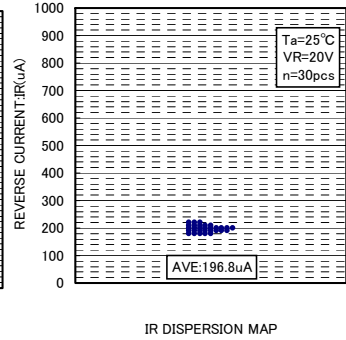
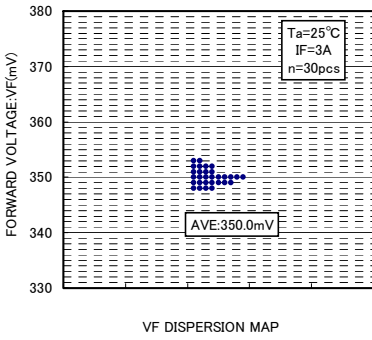
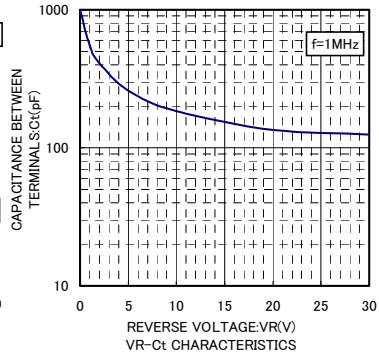
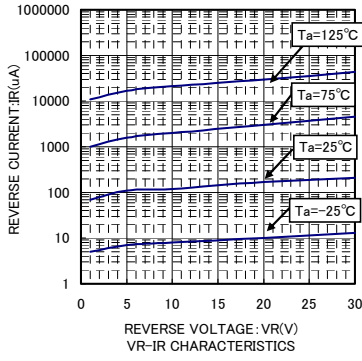
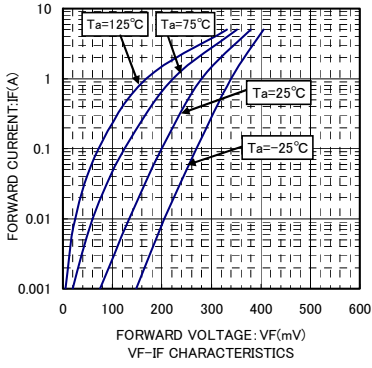
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V <sub>RM</sub>	25	V
Reverse voltage (DC)	V <sub>R</sub>	20	V
Average rectified forward current (*1)	I <sub>o</sub>	5.0	A
Forward current surge peak (60Hz·1cyc)	I <sub>FSM</sub>	70	A
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-40 to +125	°C

(\*1) Alumina substrate at the time of assemble, T<sub>c</sub>=90°C max.

●Electrical characteristic (Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>	-	-	0.39	V	I <sub>F</sub> =3.0A
Reverse current	I <sub>R</sub>	-	-	500	μA	V <sub>R</sub> =20V

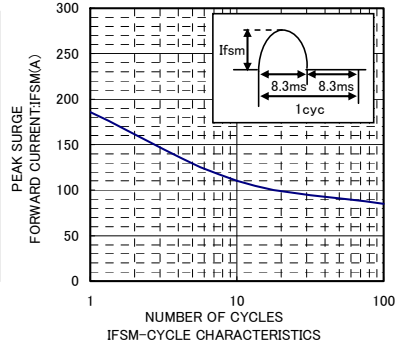
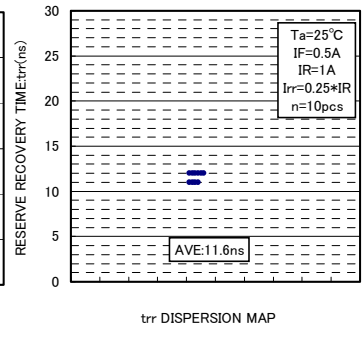
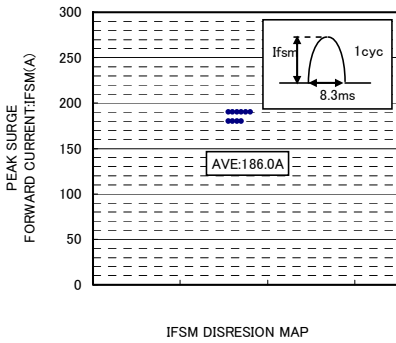
●Electrical characteristic curves



VF DISPERSION MAP

IR DISPERSION MAP

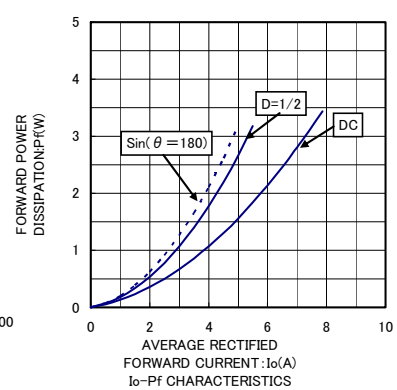
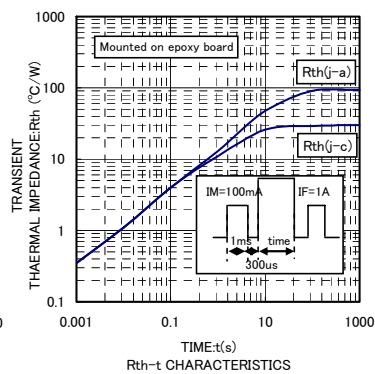
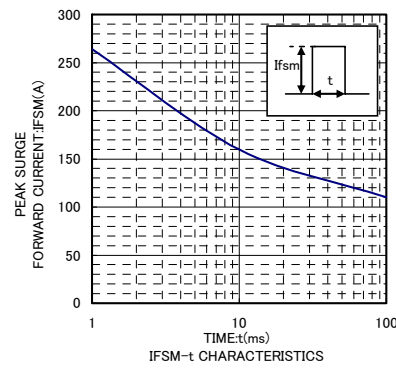
Ct DISPERSION MAP



IFSM DISERSION MAP

trr DISPERSION MAP

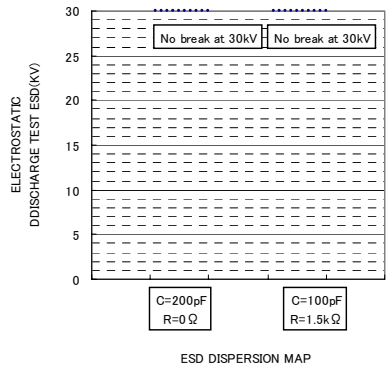
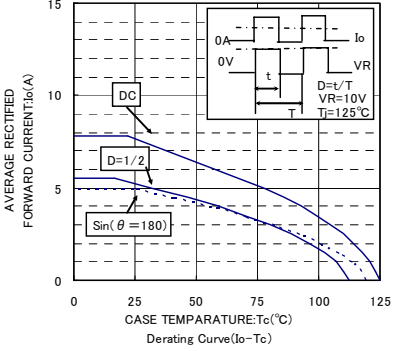
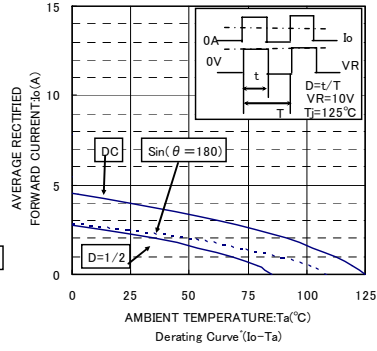
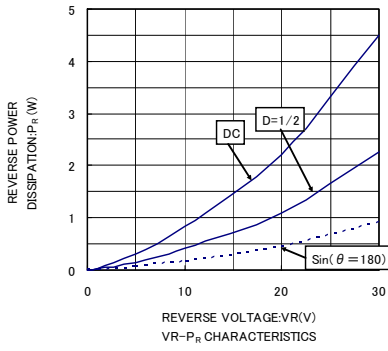
IFSM-CYCLE CHARACTERISTICS



IFSM-t CHARACTERISTICS

Rth-t CHARACTERISTICS

Io-Pf CHARACTERISTICS



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