Schottky Barrier Diode

RSX501L-20 Data Sheet

●Application

General rectification

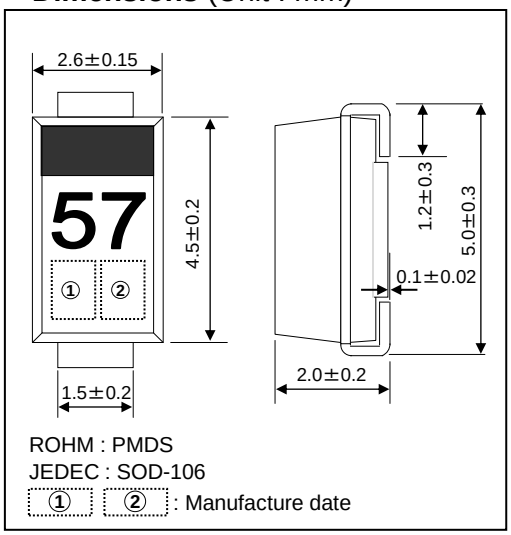
●Features

1) Small power mold type (PMDS)
2) High reliability
3) Low V_F and low I_R

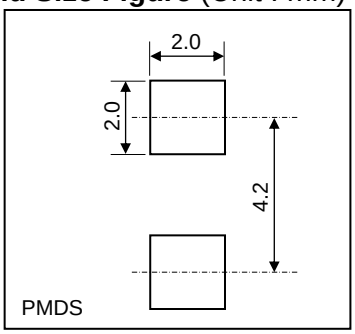
●Construction

Silicon epitaxial planar type

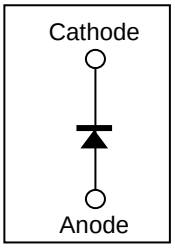
●Dimensions (Unit : mm)



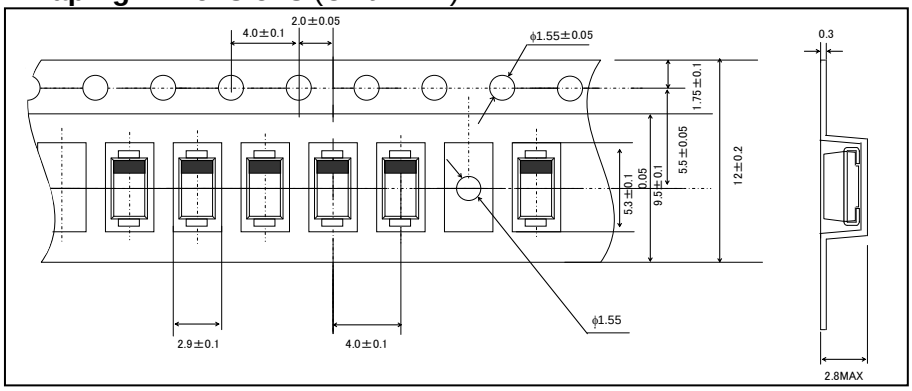
●Land Size Figure (Unit : mm)



●Structure



●Taping Dimensions (Unit : mm)



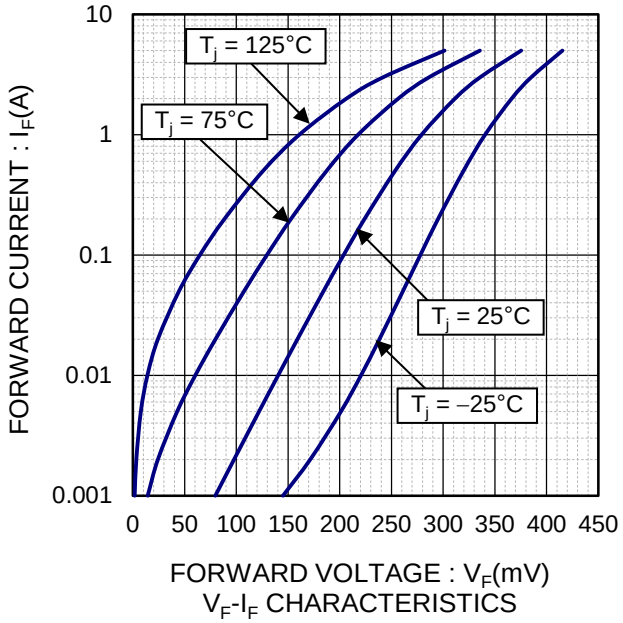
●Absolute Maximum Ratings (T_a= 25°C)

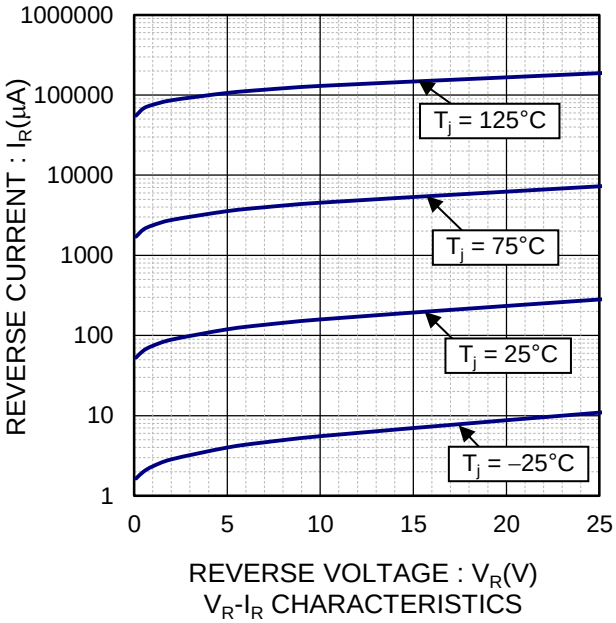
Parameter	Symbol	Conditions	Limits	Unit
Repetitive Peak Reverse Voltage	V_{RM}	Duty≦0.5	25	V
Reverse Voltage	V_R	Direct Reverse Voltage	20	V
Average Forward Rectified Current	I_o	Alumina board mounted, 60Hz half sin Wave, resistive load, T_c=90ºCmax.	5	A
Non-repetitive Forward Current Surge Peak	I_{FSM}	60Hz half sin wave, one cycle, non-repetitive at T_a=25°C	70	A
Operating Junction Temperature	T_j	-	125	°C
Storage Temperature	T_{stg}	-	−40 to +125	°C

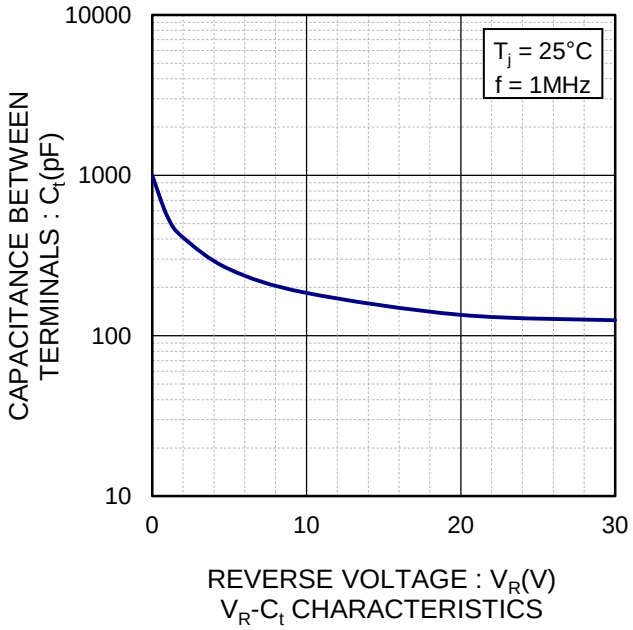
●Electrical Characteristics (T_a = 25°C)

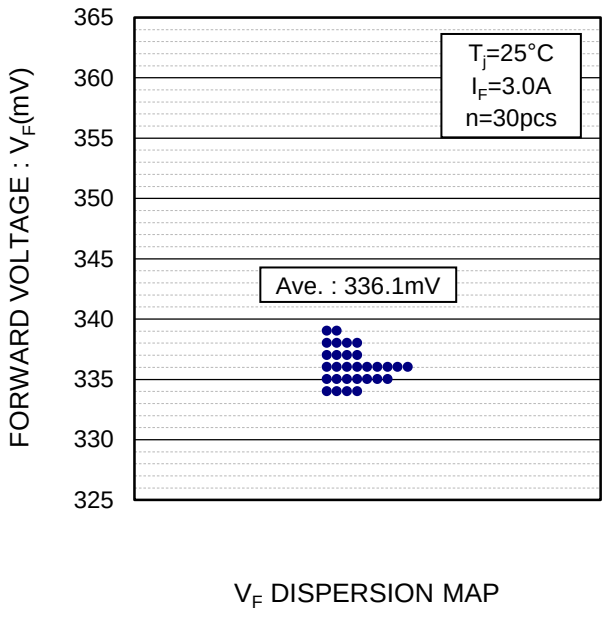
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=3.0A	-	-	0.39	V
Reverse Current	I_R	V_R=20V	-	-	500	μA

●Electrical Characteristic Curves

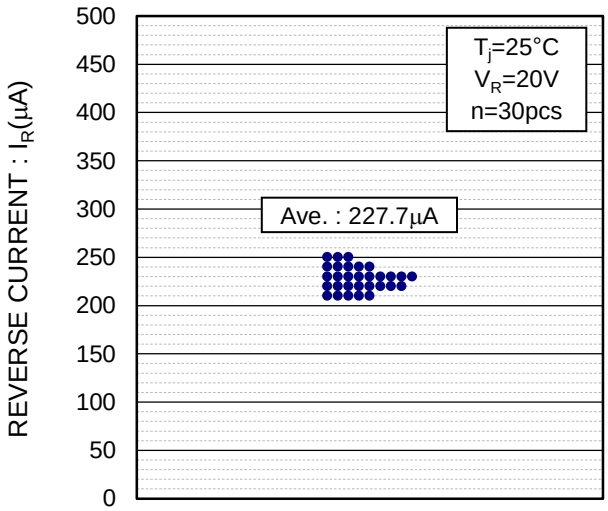




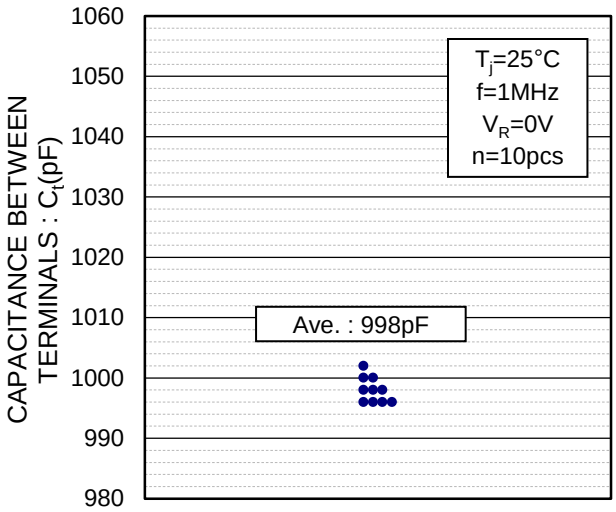




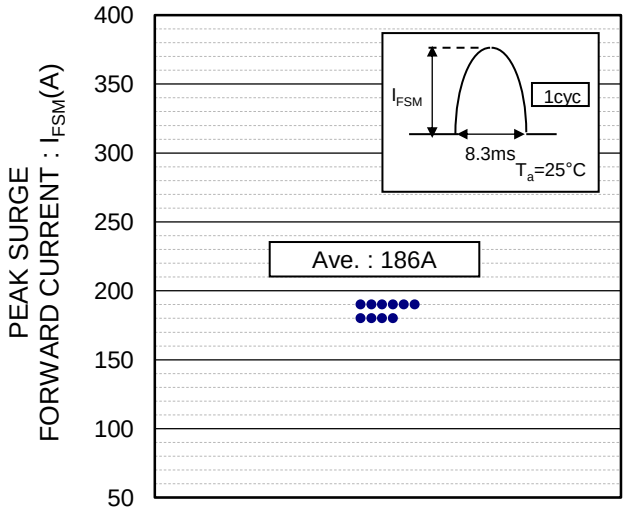
●Electrical Characteristic Curves



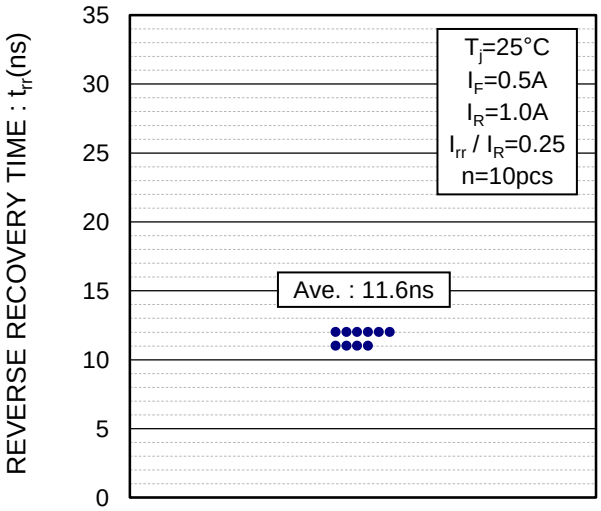
I_R DISPERSION MAP



C_t DISPERSION MAP

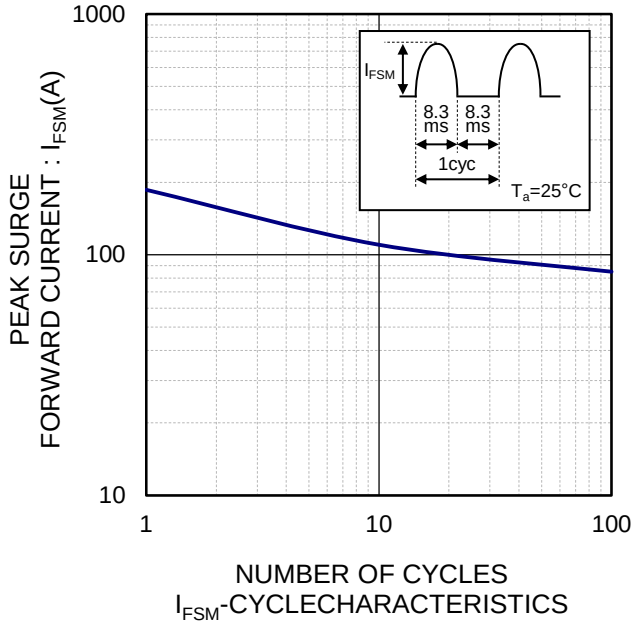


I_{FSM} DISPERSION MAP

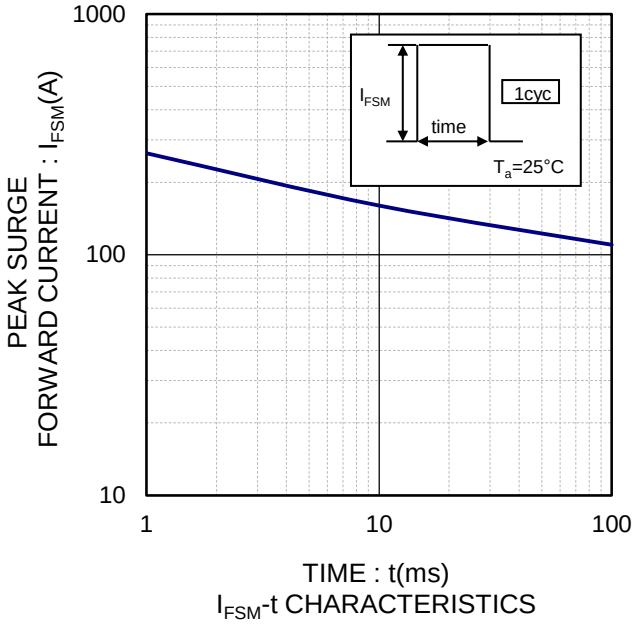


t_{rr} DISPERSION MAP

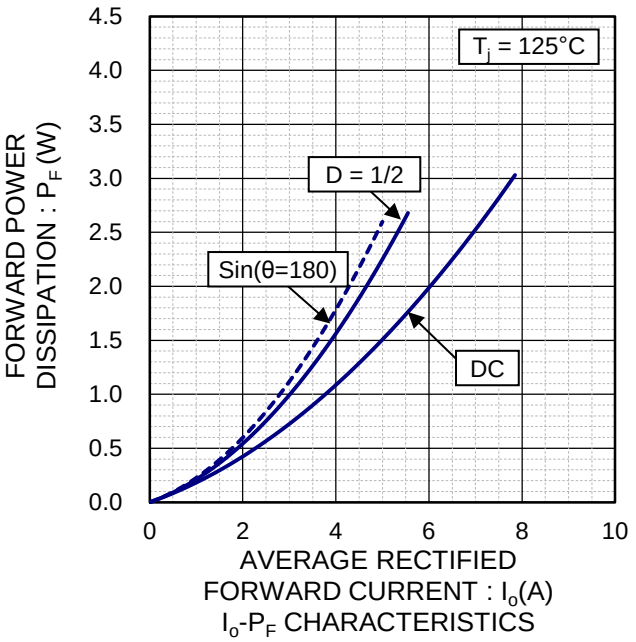
●Electrical Characteristic Curves



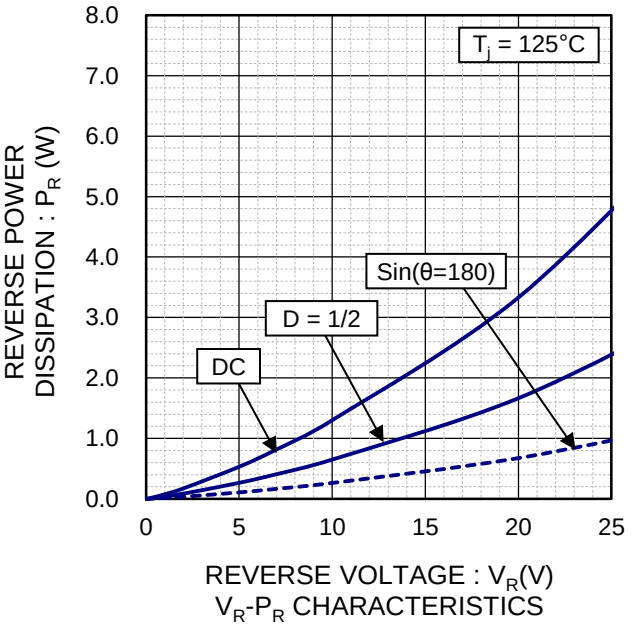
I_{FSM}-CYCLECHARACTERISTICS



I_{FSM}-t CHARACTERISTICS

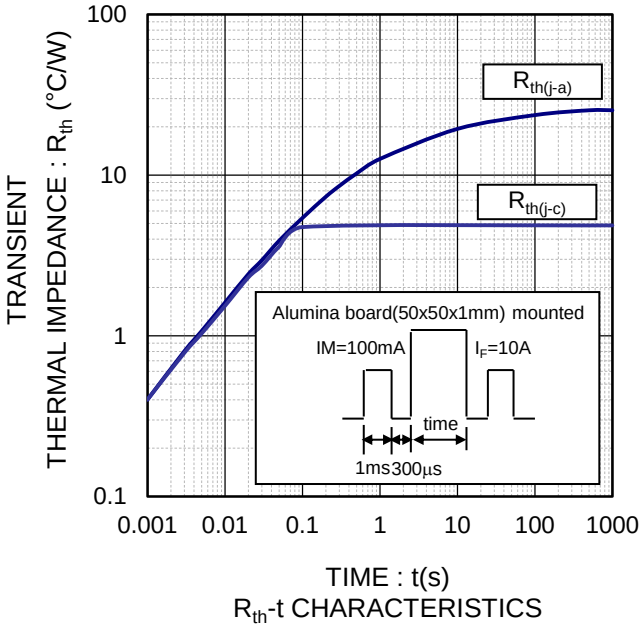


I_o-P_F CHARACTERISTICS

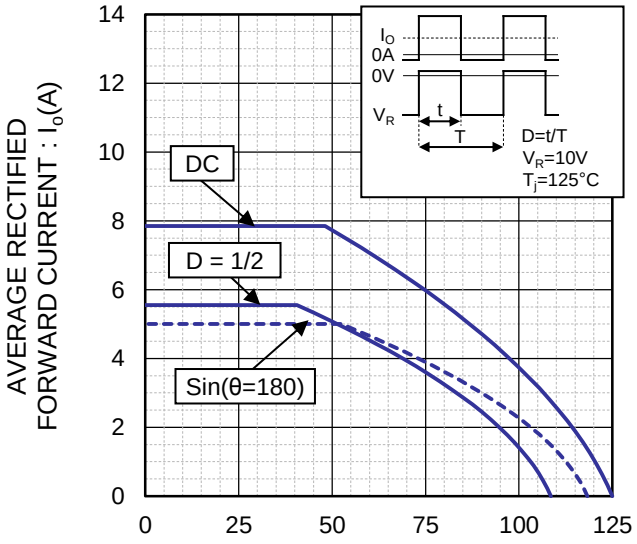


V_R-P_R CHARACTERISTICS

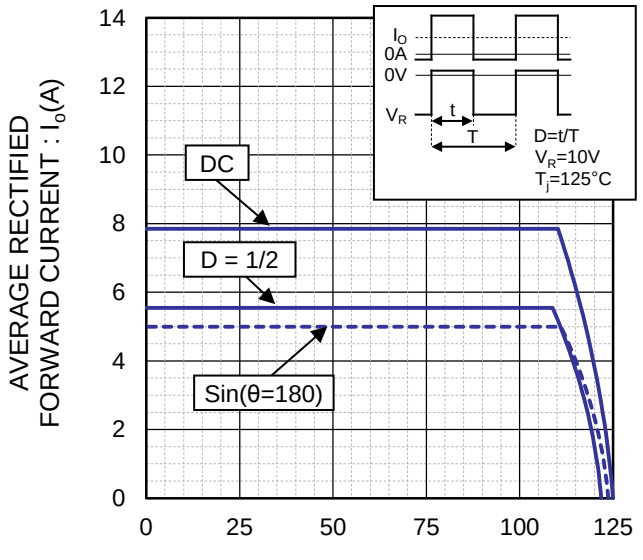
●Electrical Characteristic Curves



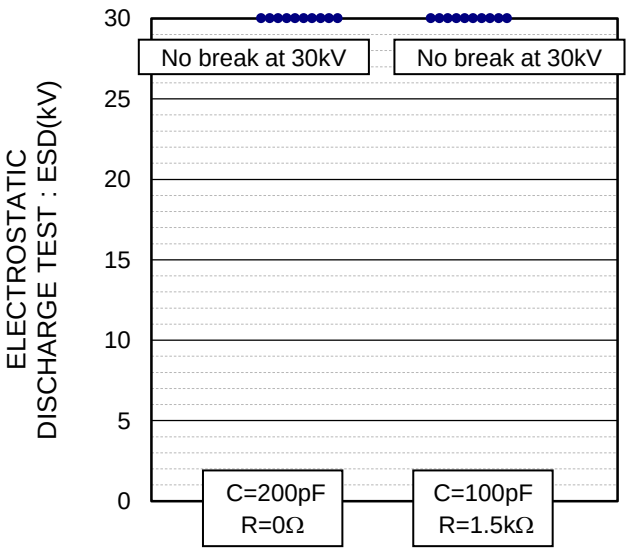
R_{th}-t CHARACTERISTICS



DERATING CURVE (I_o-T_a)



DERATING CURVE (I_o-T_c)



ESD DISPERSION MAP

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