

Schottky Barrier Diode

RB051M-2Y

●Applications

General rectification

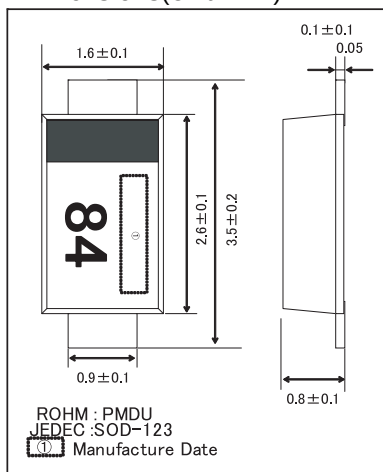
●Features

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

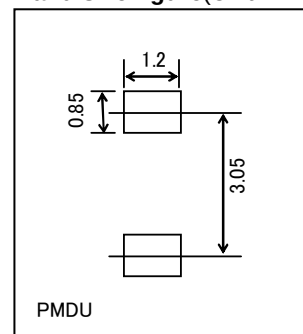
●Construction

Silicon epitaxial planer

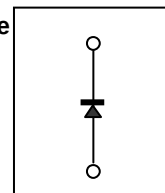
●Dimensions(Unit : mm)



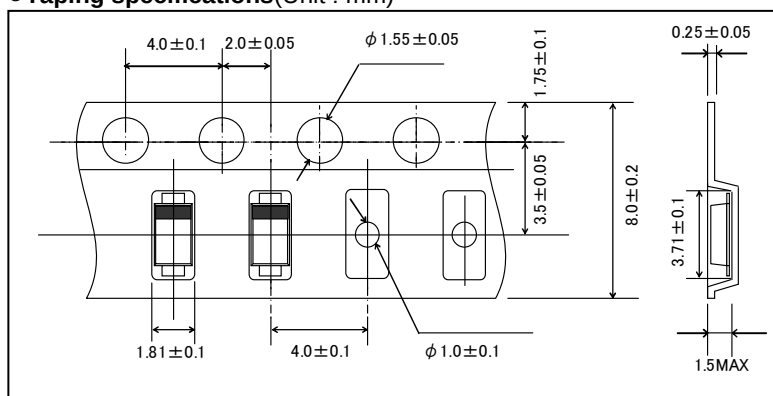
●Land size figure(Unit : mm)



●Structure



●Taping specifications(Unit : mm)



●Absolute maximum ratings(Ta=25°C)

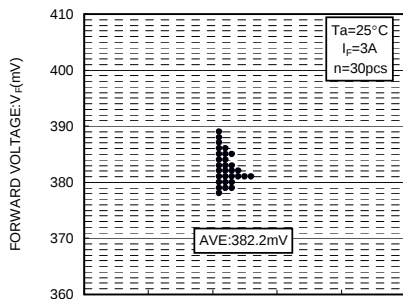
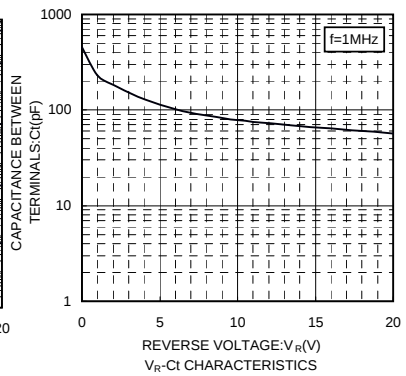
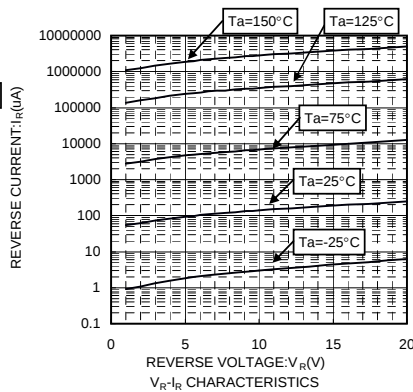
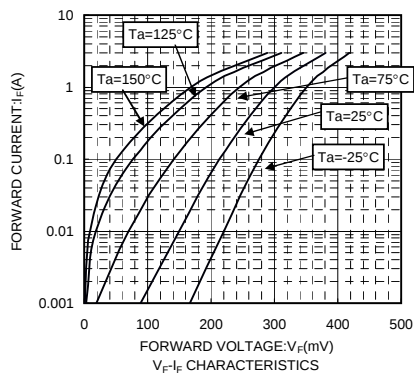
Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive)	V_{RM}	20	V
Reverse voltage (DC)	V_R	20	V
Average rectified forward current(*1)	I_o	3	A
Forward current surge peak (60Hz·1cyc)	I_{FSM}	30	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

(*1) Mounting on alumina board. $T_c=95^{\circ}\text{C}$ Max.

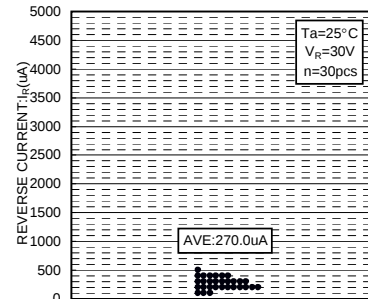
●Electrical characteristics(Ta=25°C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	-	-	0.46	V	$I_F=3\text{A}$
Reverse current	I_R	-	-	0.9	mA	$V_R=20\text{V}$

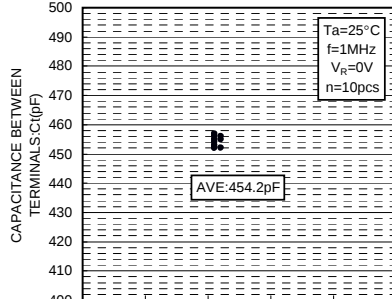
●Electrical characteristic curves



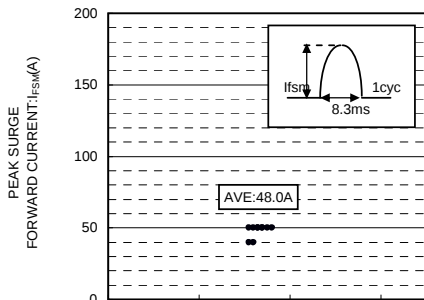
V_F DISPERSION MAP



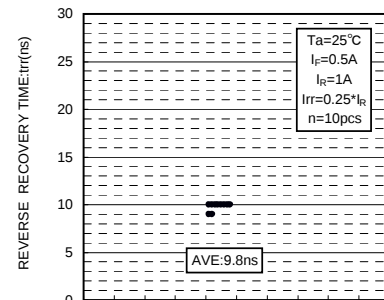
I_R DISPERSION MAP



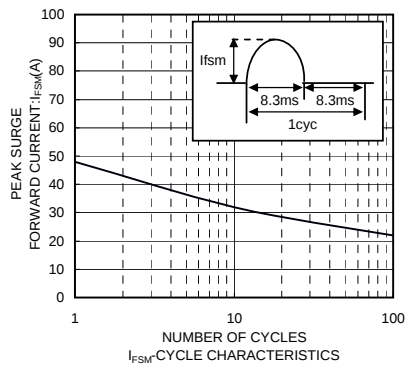
C_t DISPERSION MAP



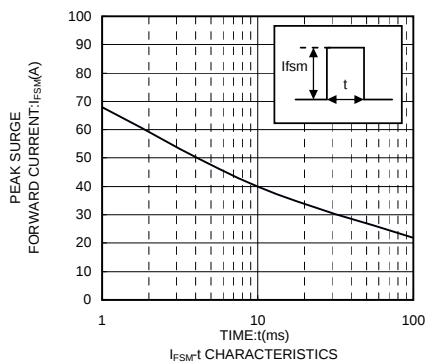
I_{FSM} DISPERSION MAP



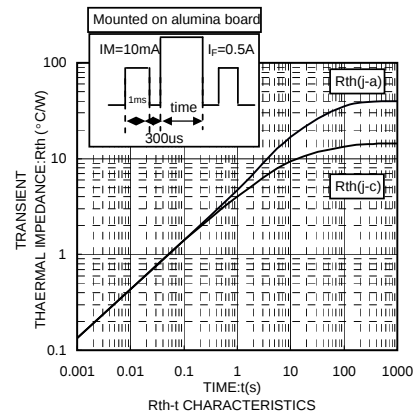
t_{rr} DISPERSION MAP



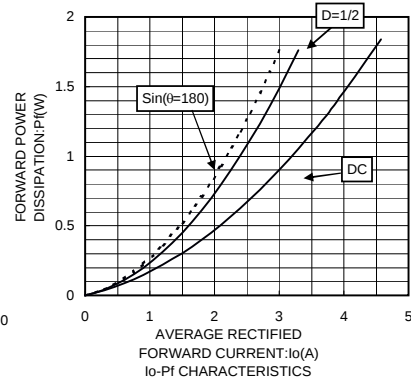
I_{FSM} CYCLE CHARACTERISTICS



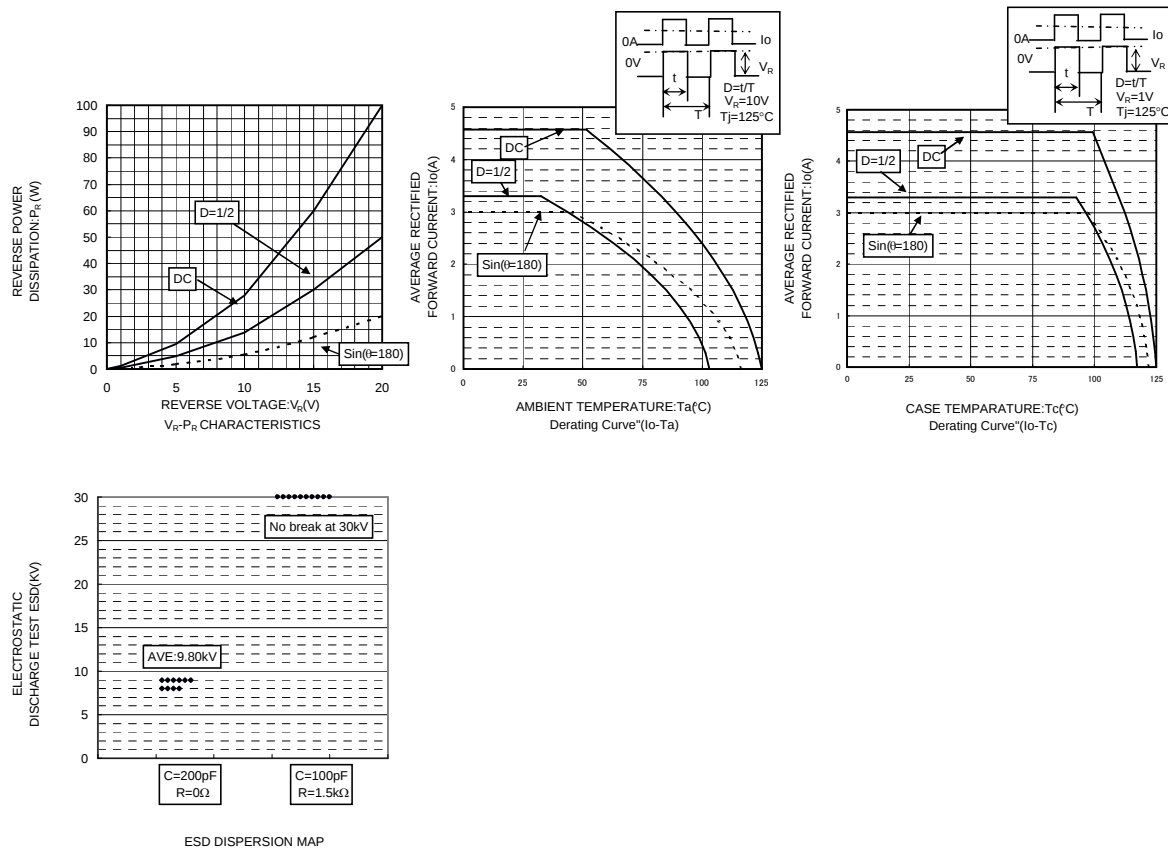
$I_{FSM}t$ CHARACTERISTICS



$R_{th}t$ CHARACTERISTICS



$I_o - P$ CHARACTERISTICS



Notes

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