

Schottky Barrier Diode

RB051L-40

●Applications

General rectification

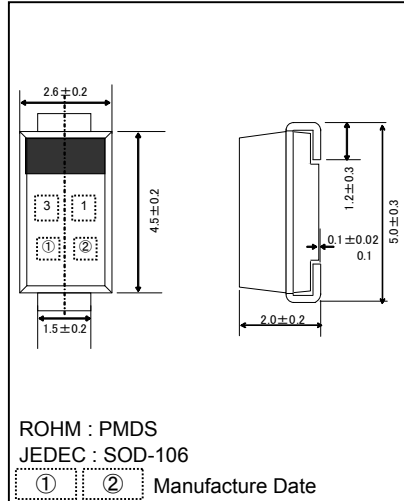
●Features

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

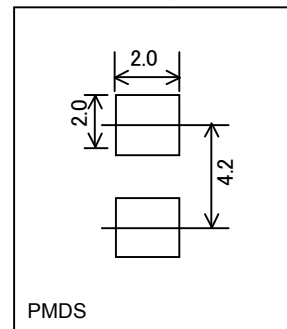
●Construction

Silicon epitaxial planar

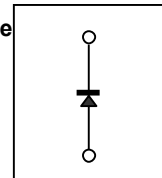
●Dimensions (Unit : mm)



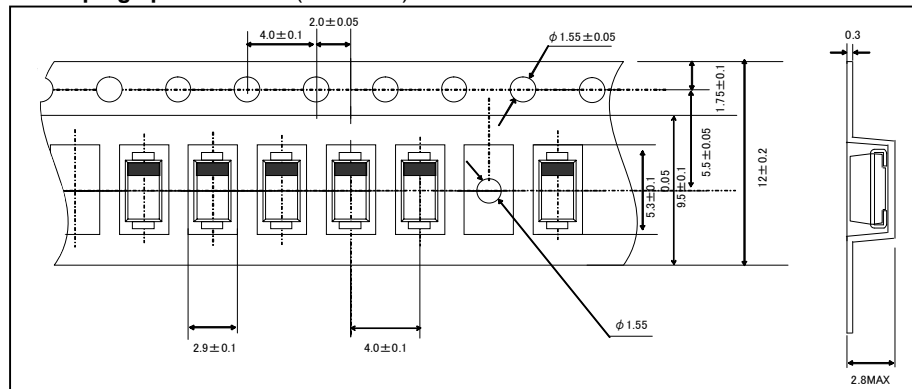
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



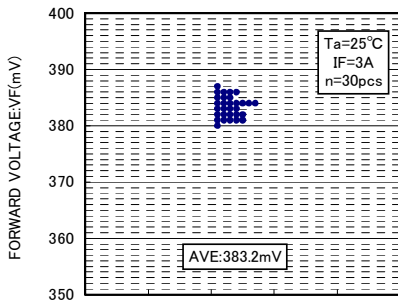
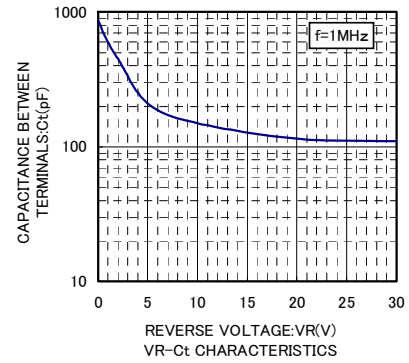
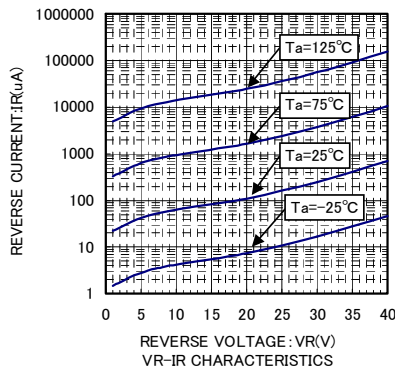
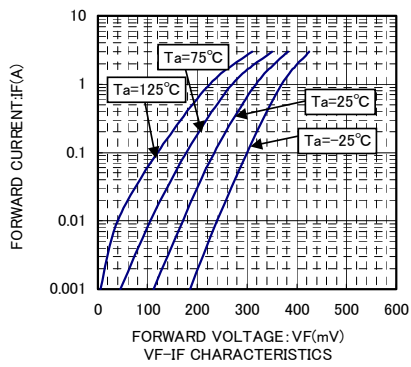
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	20	V
Average rectified forward current	I_o	3	A
Forward current surge peak (60Hz·1cyc)	I_{FSM}	70	A
Junction temperature	T_j	125	°C
Storage temperature	T_{stg}	-40 to +125	°C

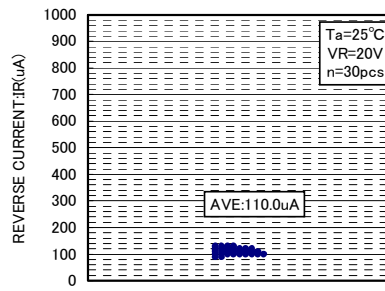
(*1) Mounted on epoxyboard. 180°Half sine wave

●Electrical characteristics (Ta=25°C)

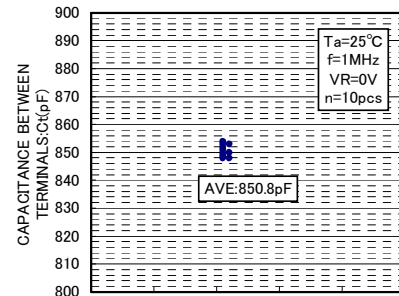
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.35	V	$I_F=1.0A$
	V_{F2}	-	-	0.45	V	$I_F=3.0A$
Reverse current	I_{R1}	-	-	1	mA	$V_R=20V$
	I_{R2}	-	-	150	μA	$V_R=15V$



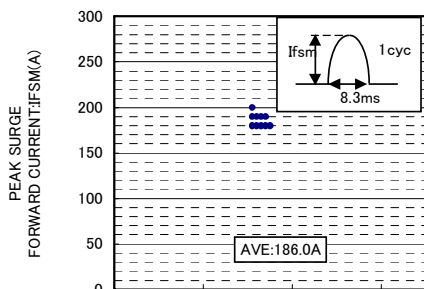
VF DISPERSION MAP



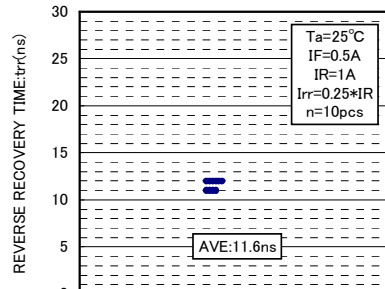
IR DISPERSION MAP



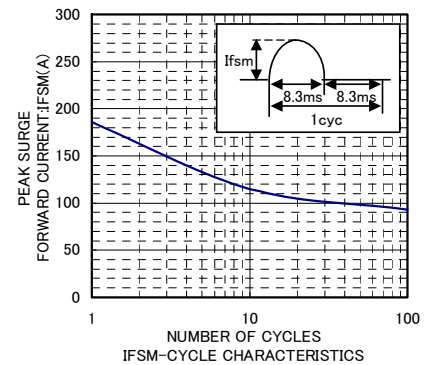
Ct DISPERSION MAP



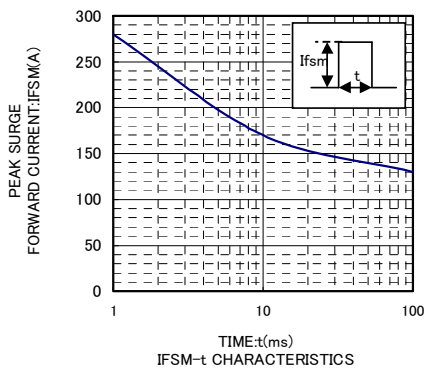
IFSM DISERSION MAP



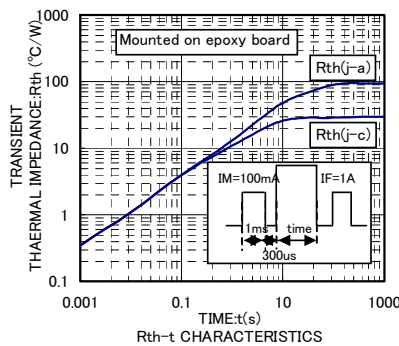
trr DISPERSION MAP



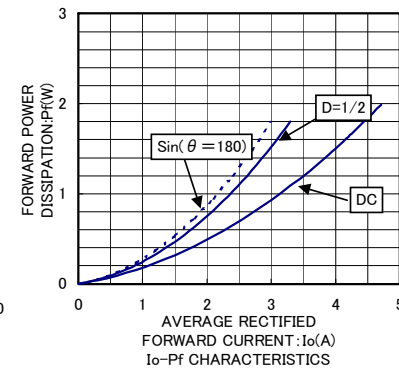
IFSM-CYCLE CHARACTERISTICS



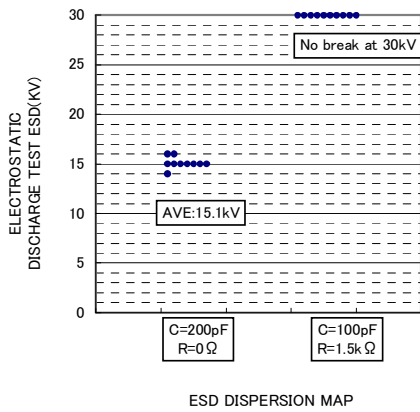
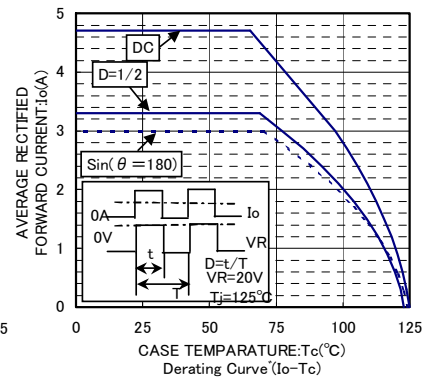
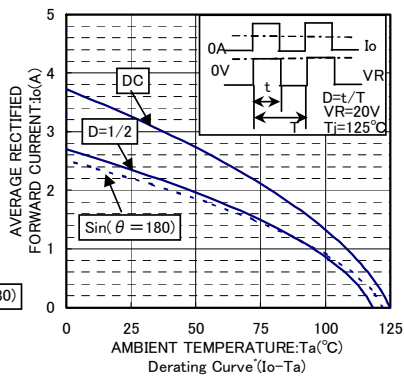
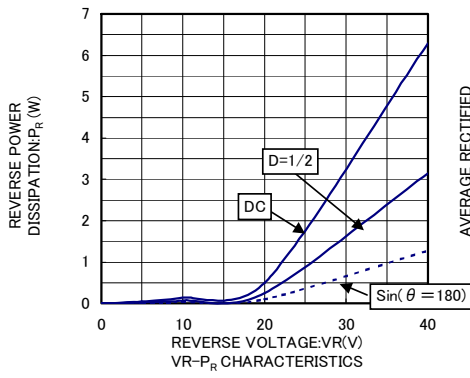
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS



Notes

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