

# Schottky barrier diode

## RB051L-40

### ●Applications

General rectification

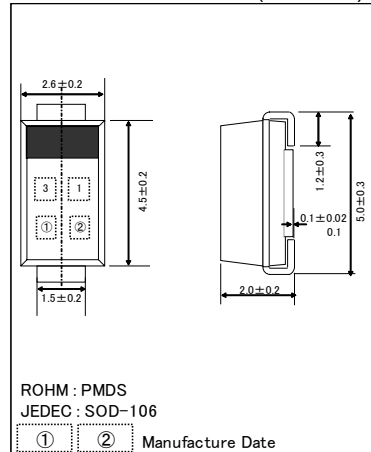
### ●Features

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

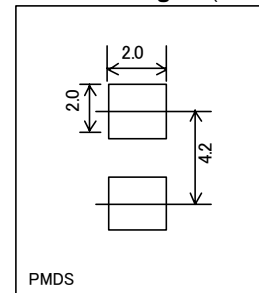
### ●Construction

Silicon epitaxial planar

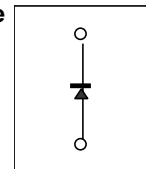
### ● External dimensions (Unit : mm)



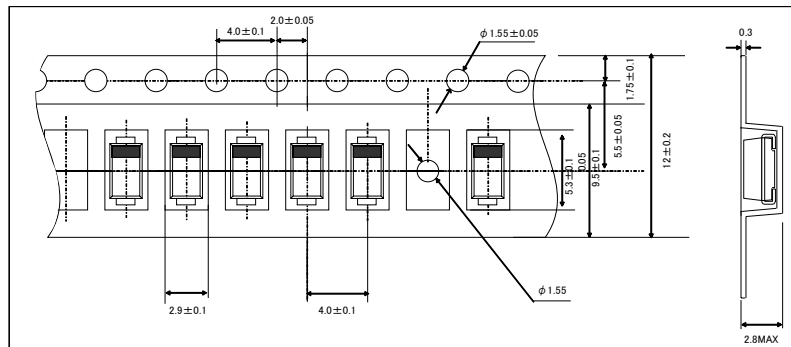
### ● Land size figure (Unit : mm)



### ●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

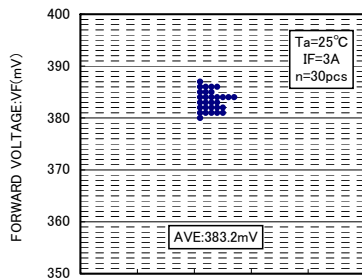
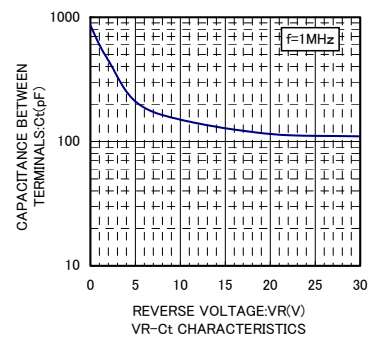
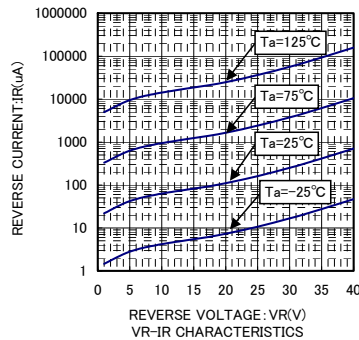
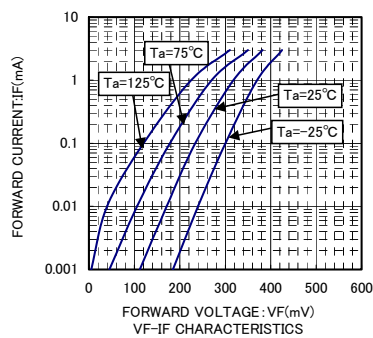
(\*1) Mounted on epoxyboard. 180°Half sine wave

### ●Electrical characteristics (Ta=25°C)

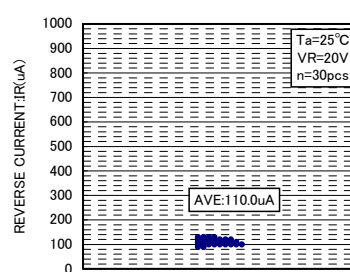
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	-	-	0.35	V	$I_F=1.0A$
	$V_{F2}$	-	-	0.45	V	$I_F=3.0A$
Reverse current	$I_{R1}$	-	-	1	mA	$V_R=20V$
	$I_{R2}$	-	-	150	μA	$V_R=15V$

## Diodes

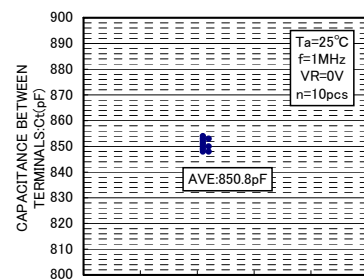
## ●Electrical characteristic curves (Ta=25°C)



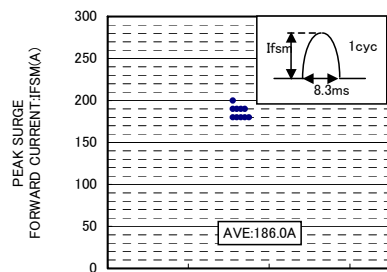
VF DISPERSION MAP



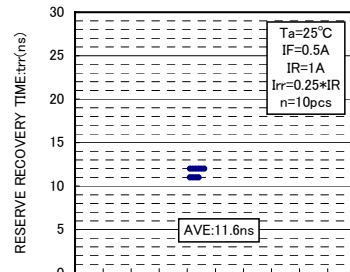
IR DISPERSION MAP



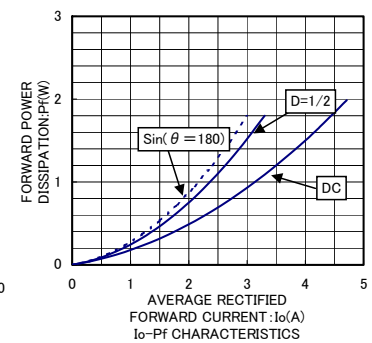
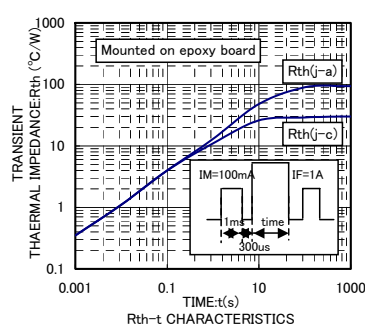
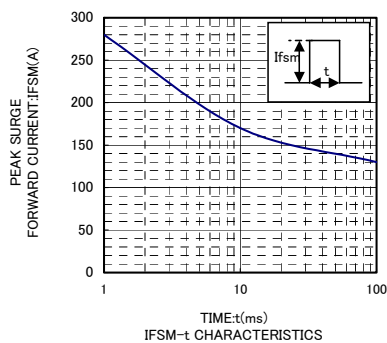
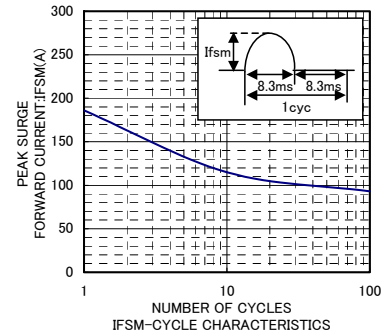
Ct DISPERSION MAP



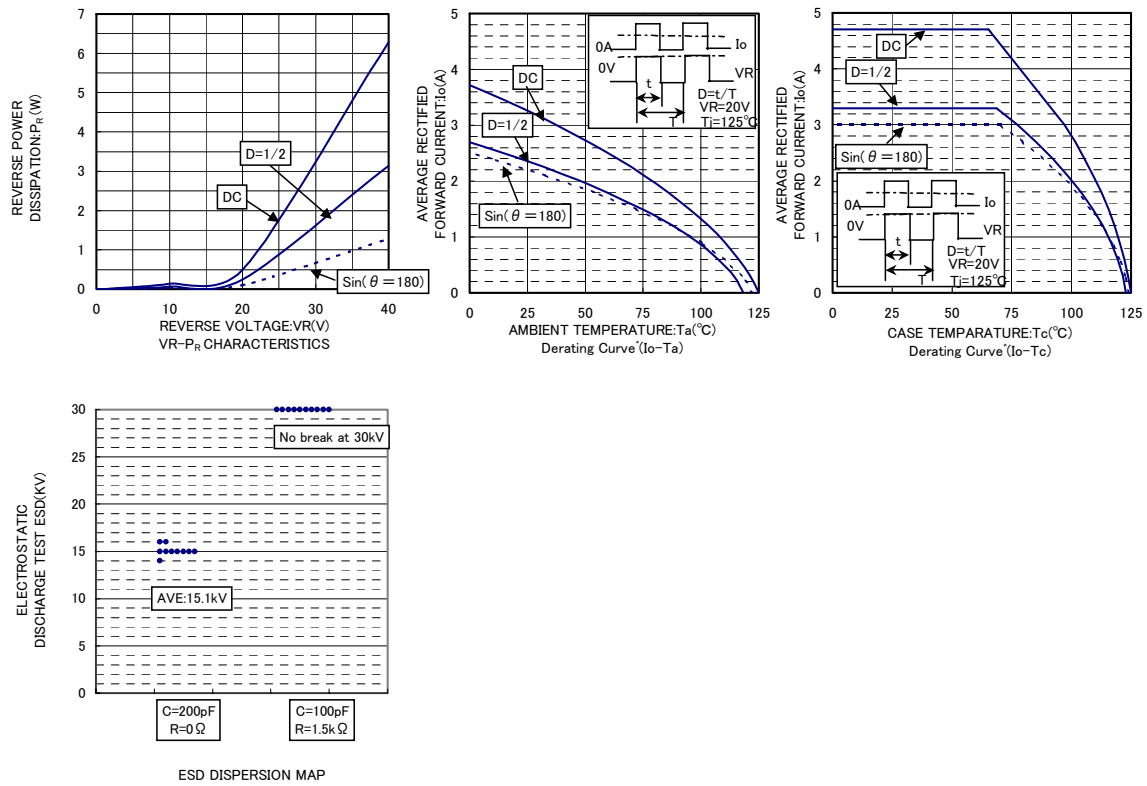
IFSM DISRESION MAP



trr DISPERSION MAP



## Diodes



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