

# Schottky barrier diode

## RB051LA-40

●Applications

General rectification

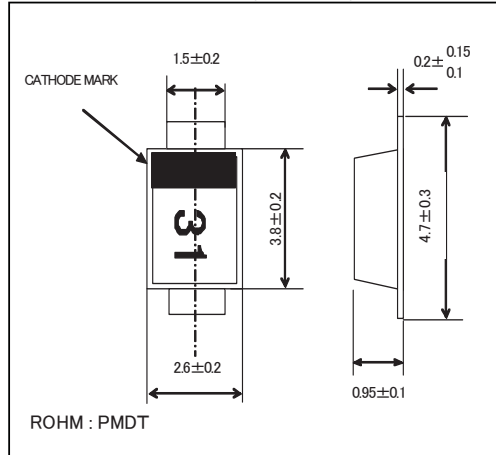
●Features

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

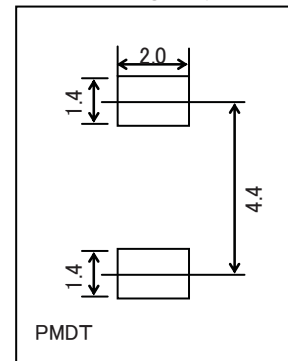
●Structure

Silicon epitaxial planar

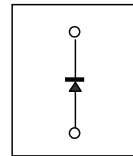
●External dimensions (Unit : mm)



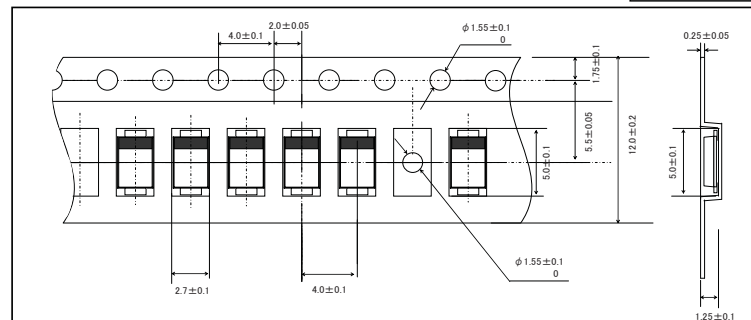
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V <sub>RM</sub>	40	V
Reverse voltage (DC)	V <sub>R</sub>	20	V
Average rectified forward current (*1)	I <sub>o</sub>	3.0	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

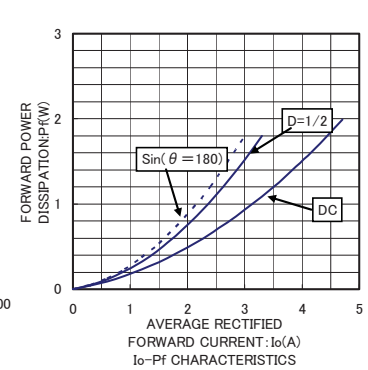
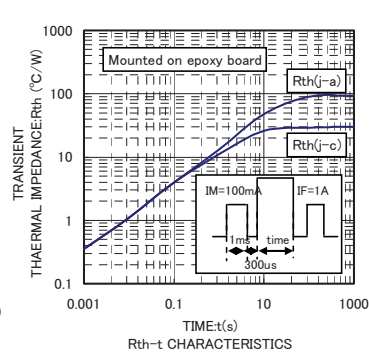
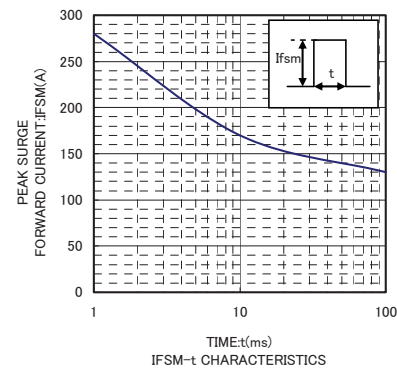
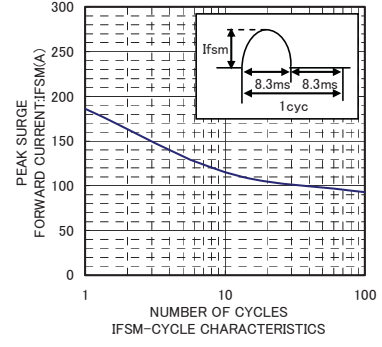
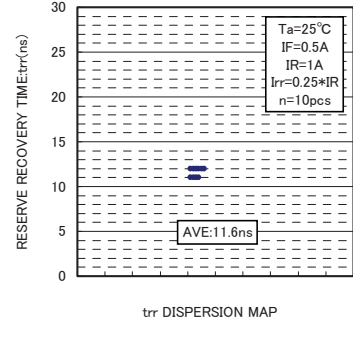
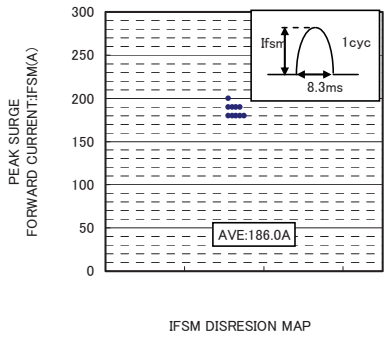
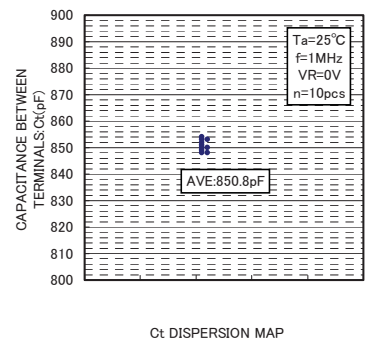
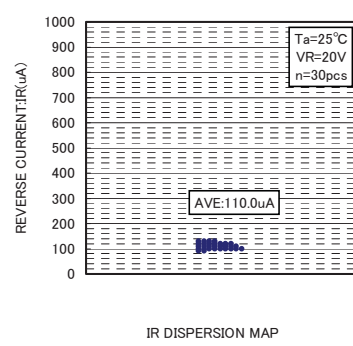
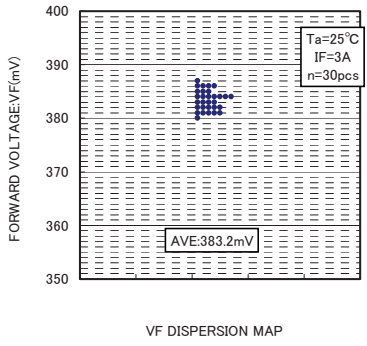
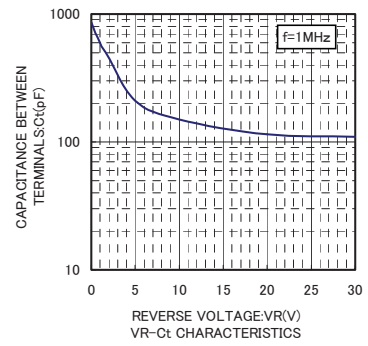
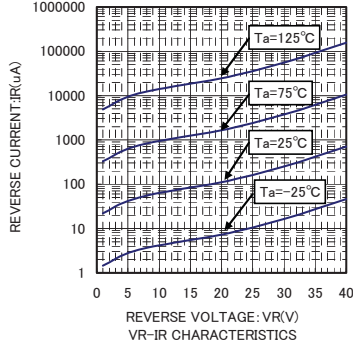
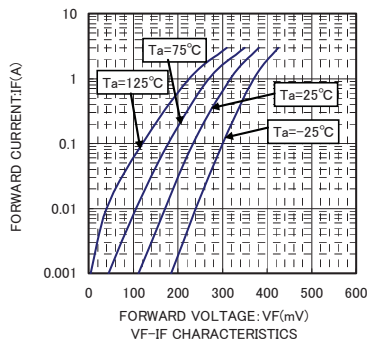
(\*1) Alumina substrate at the time of assemble, TL=90°C max.

●Electrical characteristic (Ta=25°C)

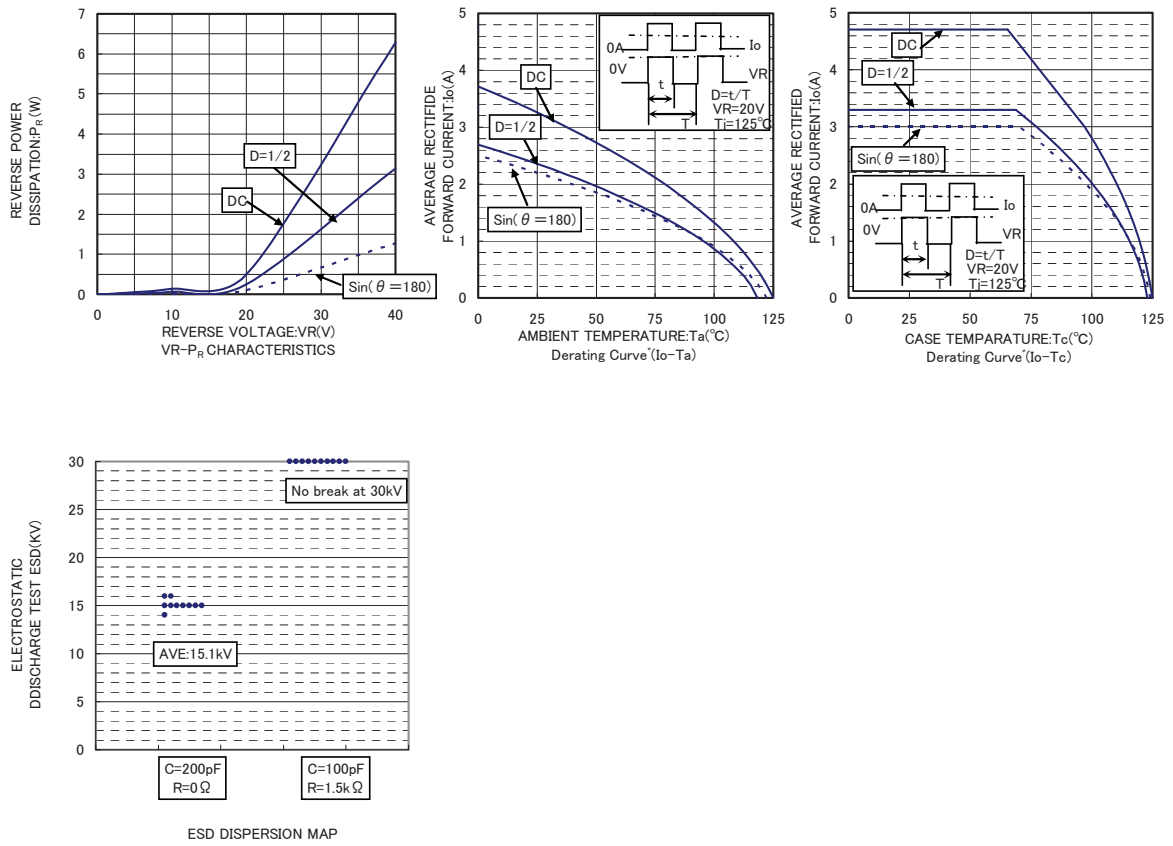
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F1</sub>	-	-	0.35	V	I <sub>F</sub> =1A
	V <sub>F2</sub>	-	-	0.45	V	I <sub>F</sub> =3A
Reverse current	I <sub>R1</sub>	-	-	1	mA	V <sub>R</sub> =20V
	I <sub>R2</sub>	-	-	150	μA	V <sub>R</sub> =15V

Diodes

●Electrical characteristic curves



Diodes



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