

Schottky barrier diode

RB051LA-40

●Applications

General rectification

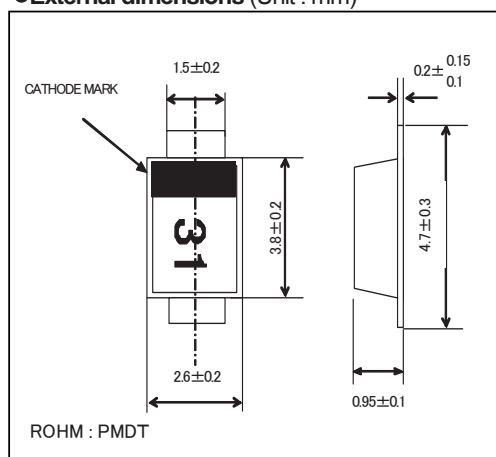
●Features

- 1) Small and Thin power type (PMDT)
- 2) High reliability.
- 3) Low I_R

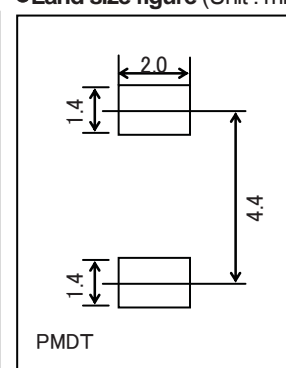
●Structure

Silicon epitaxial planar

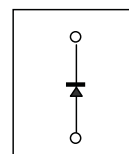
●External dimensions (Unit : mm)



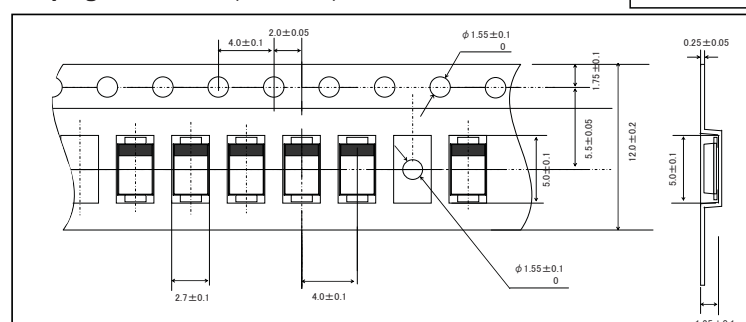
●Land size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	20	V
Average rectified forward current (*1)	I_o	3.0	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

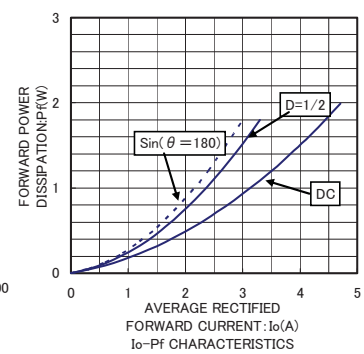
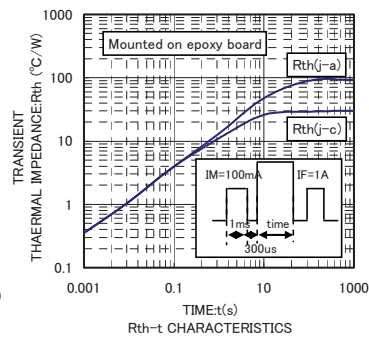
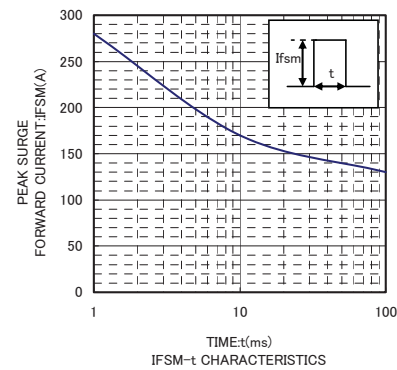
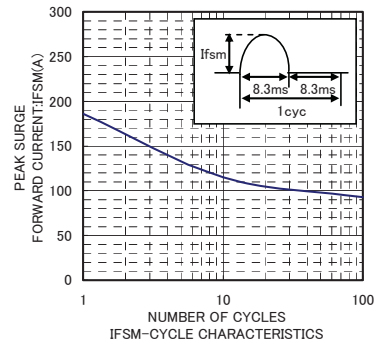
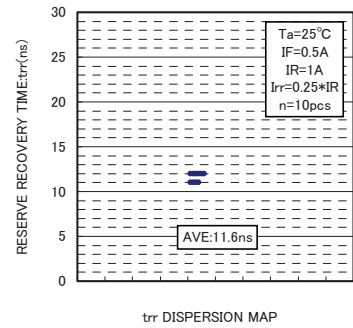
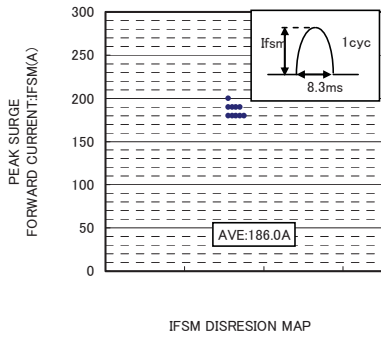
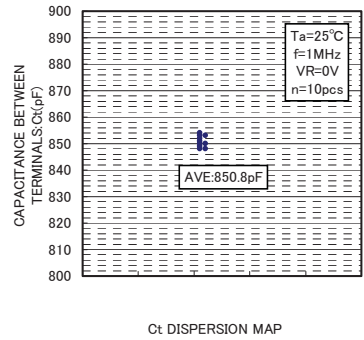
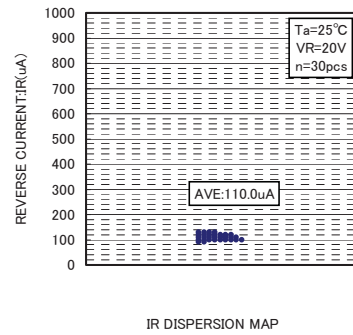
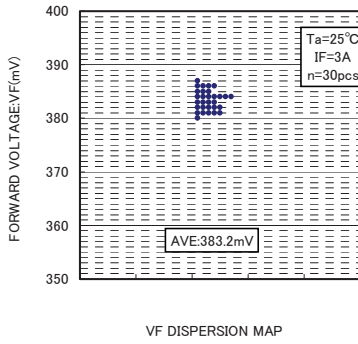
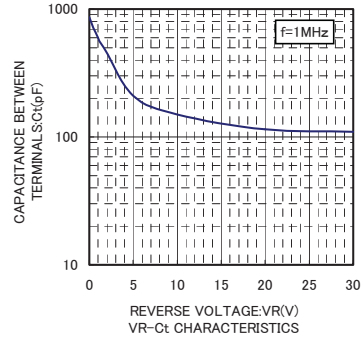
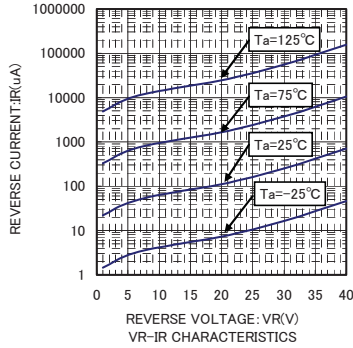
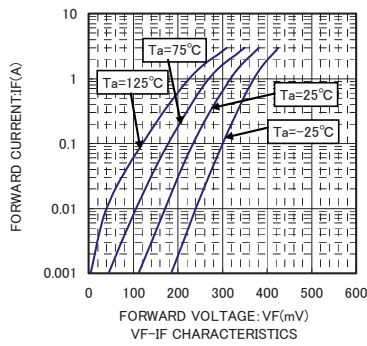
(*1) Alumina substrate at the time of assemble, $T_L=90^\circ\text{C}$ max.

●Electrical characteristic (Ta=25°C)

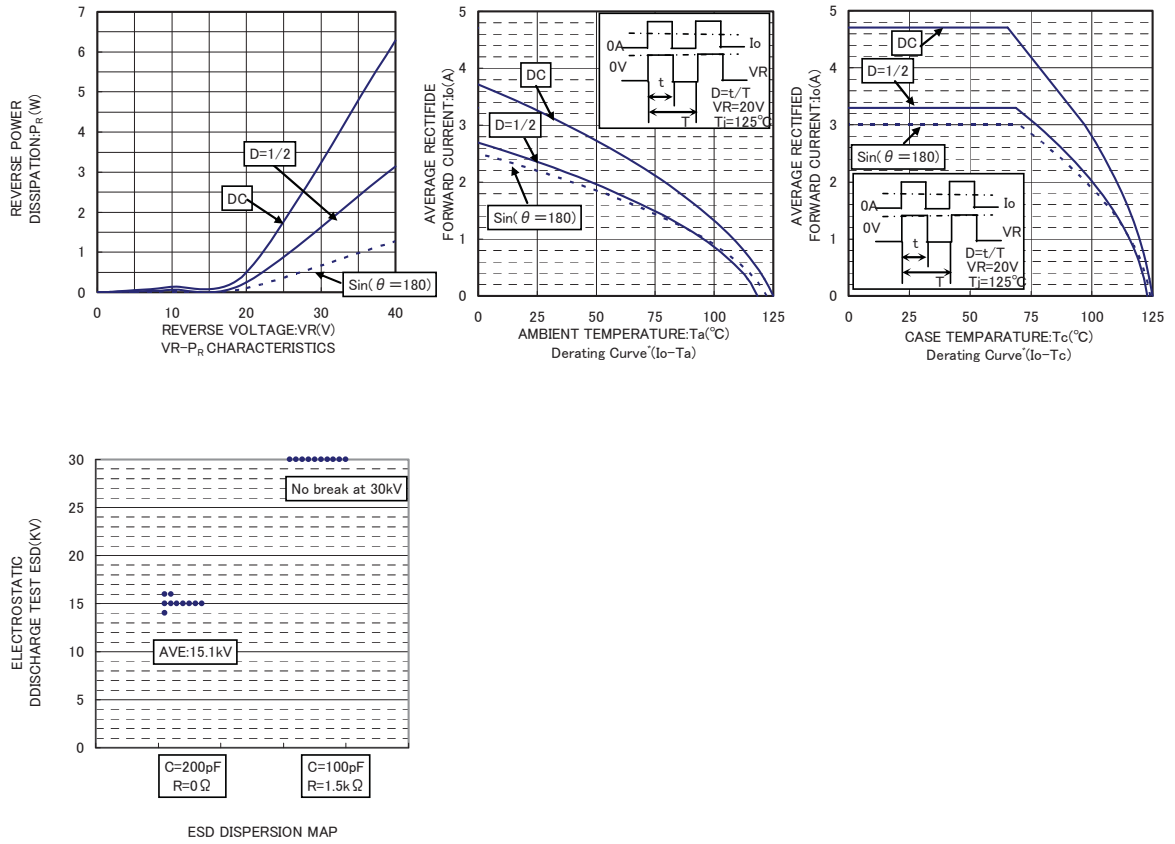
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.35	V	$I_F=1\text{A}$
	V_{F2}	-	-	0.45	V	$I_F=3\text{A}$
Reverse current	I_{R1}	-	-	1	mA	$V_R=20\text{V}$
	I_{R2}	-	-	150	μA	$V_R=15\text{V}$

Diodes

●Electrical characteristic curves



Diodes



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