

Schottky barrier diode

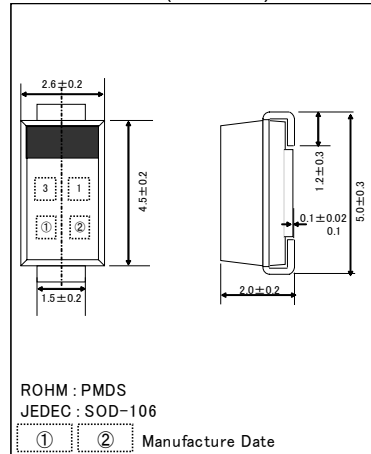
RB051L-40

●Applications
General rectification

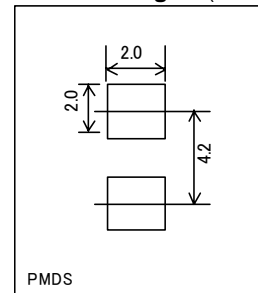
●Features
1) Small power mold type. (PMDS)
2) Low I_R .
3) High reliability.

●Construction
Silicon epitaxial planar

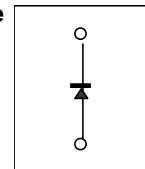
●Dimensions (Unit : mm)



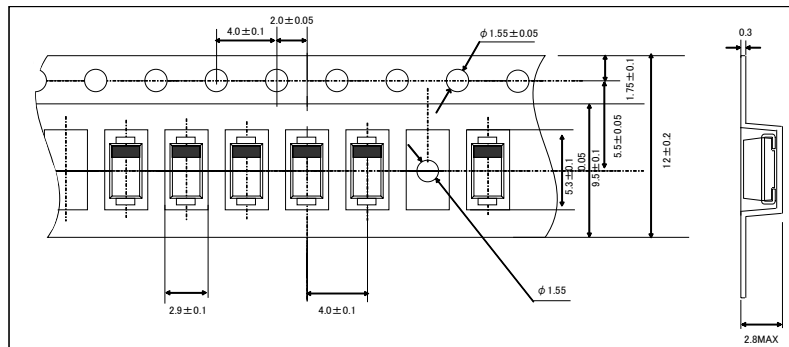
● Land size figure (Unit : mm)



●Structure



● Taping specifications (Unit : mm)



●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

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	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

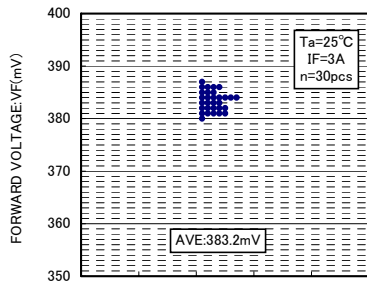
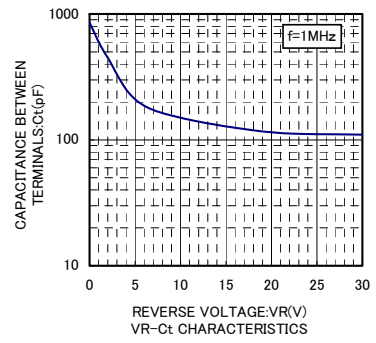
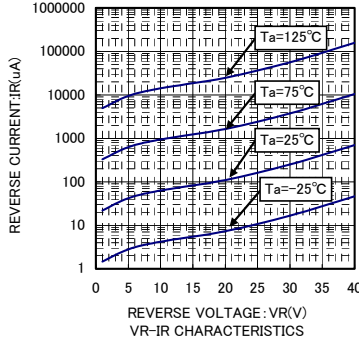
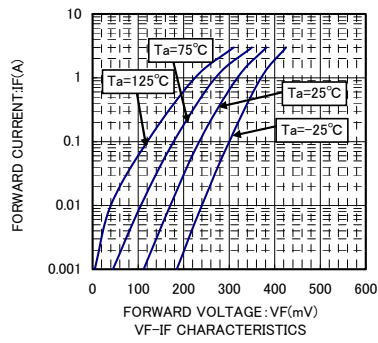
(*1) Mounted on epoxyboard. 180°Half sine wave

●Electrical characteristics ($T_a=25^\circ\text{C}$)

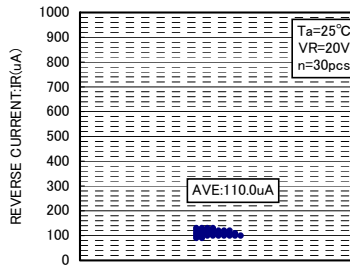
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.35	V	$I_F=1.0A$
	V_{F2}	-	-	0.45	V	$I_F=3.0A$
Reverse current	I_{R1}	-	-	1	mA	$V_R=20V$
	I_{R2}	-	-	150	μA	$V_R=15V$

Diodes

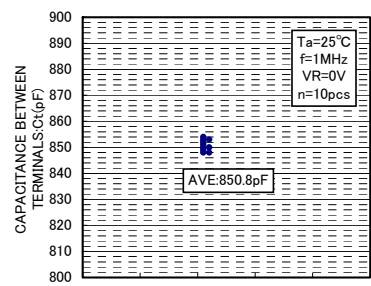
●Electrical characteristic curves (Ta=25°C)



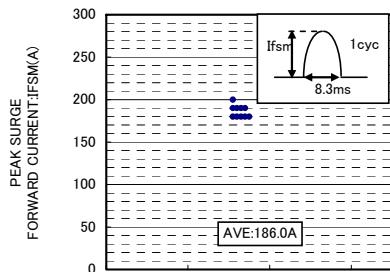
VF DISPERSION MAP



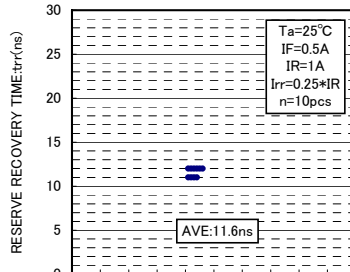
IR DISPERSION MAP



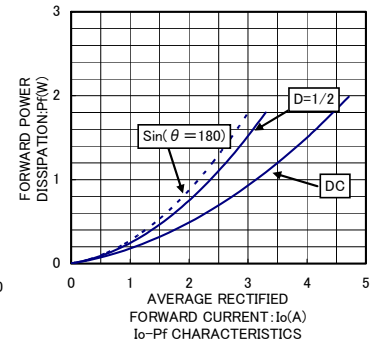
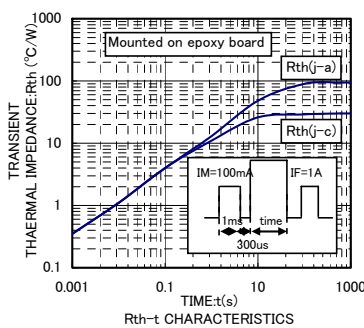
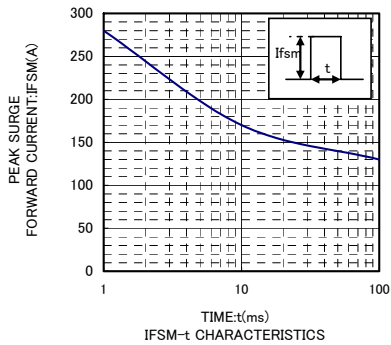
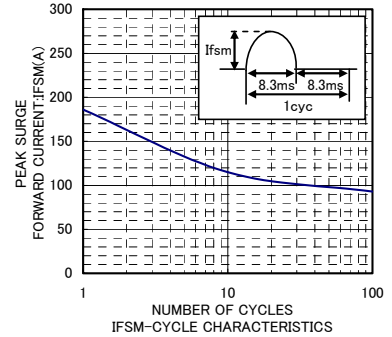
Ct DISPERSION MAP



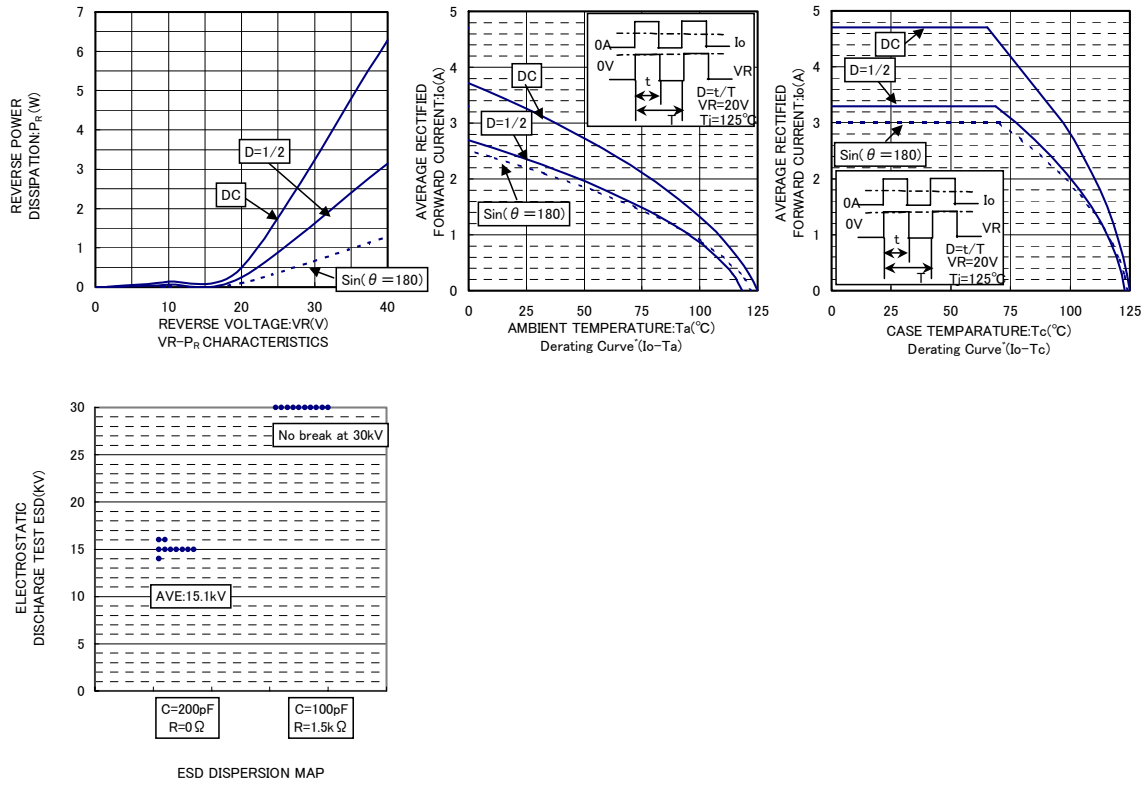
IFSM DISRESION MAP



trr DISPERSION MAP



Diodes



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