

# Shottky barrier diode

## RB491D

●Application

Low current rectification

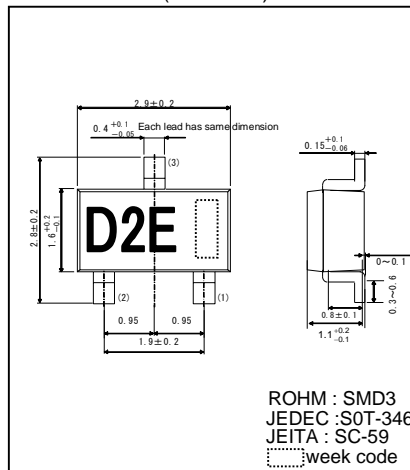
●Features

- 1) Small mold type. (SMD3)
- 2) Low I<sub>r</sub>
- 3) High reliability.

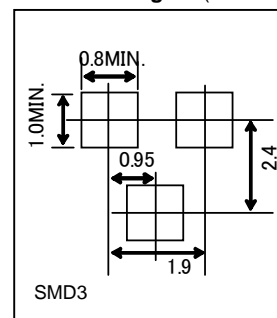
●Structure

Silicon epitaxial planar

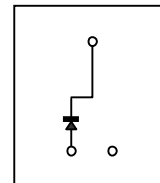
●Dimensions (Unit : mm)



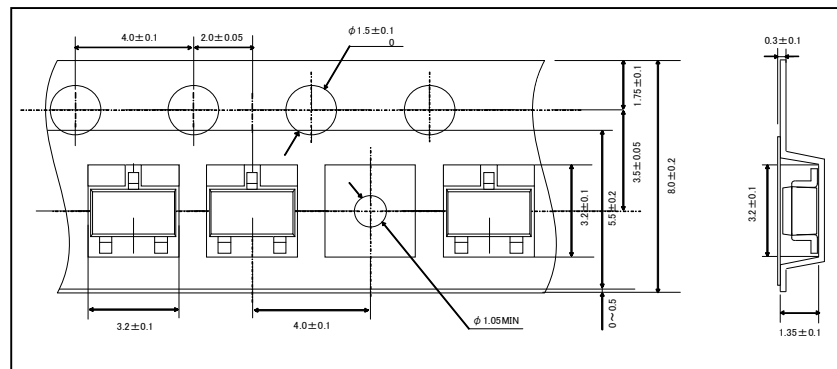
●Lead size figure (Unit : mm)



●Structure



●Taping dimensions (Unit : mm)



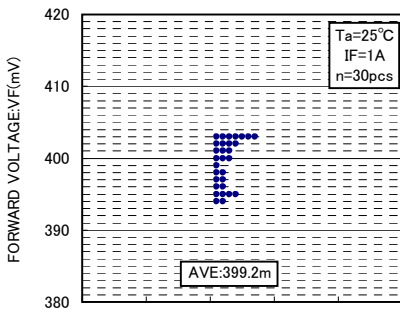
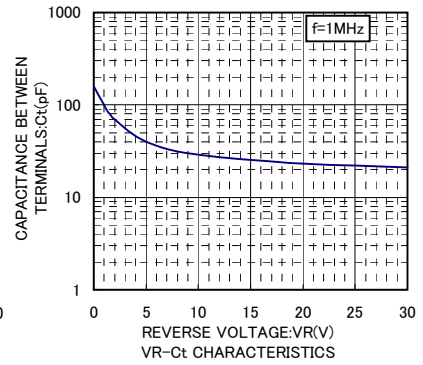
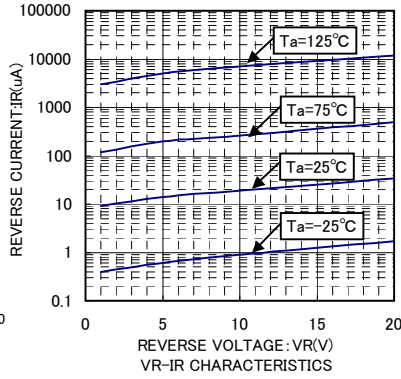
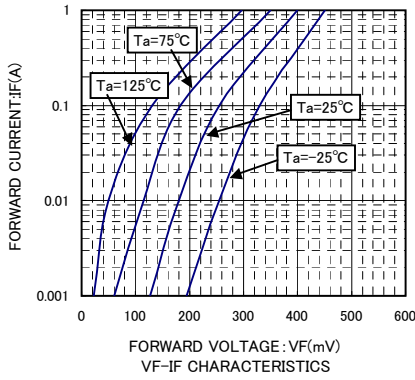
●Absolute maximum ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V <sub>RM</sub>	25	V
Reverse voltage (DC)	V <sub>R</sub>	20	V
Average rectified forward voltage (*1)	I <sub>o</sub>	1	A
Forward current surge peak (60Hz· 1cyc) (*1)	I <sub>FSM</sub>	3	A
Junction temperature	T <sub>j</sub>	125	°C
Storage temperature	T <sub>stg</sub>	-40 to +125	°C

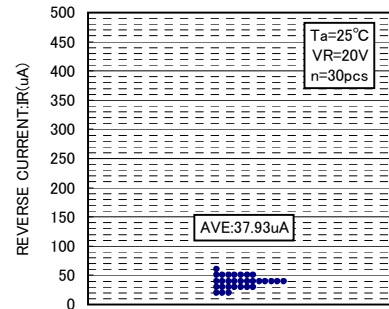
(\*1) Rating of per diode

●Electrical characteristics (Ta=25°C)

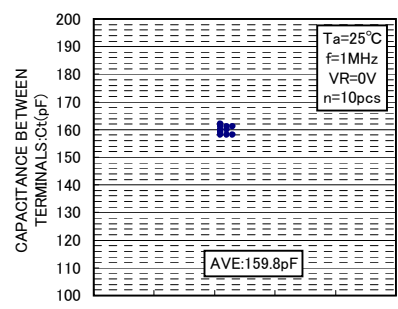
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V <sub>F</sub>	-	-	0.45	V	I <sub>F</sub> =1A
Reverse current	I <sub>R</sub>	-	-	200	μA	V <sub>R</sub> =20V



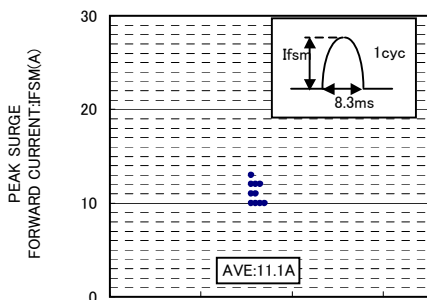
VF DISPERSION MAP



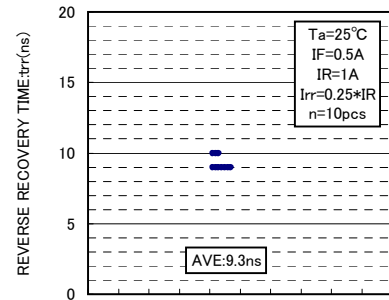
IR DISPERSION MAP



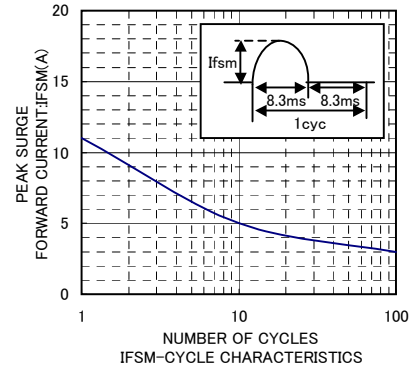
Ct DISPERSION MAP



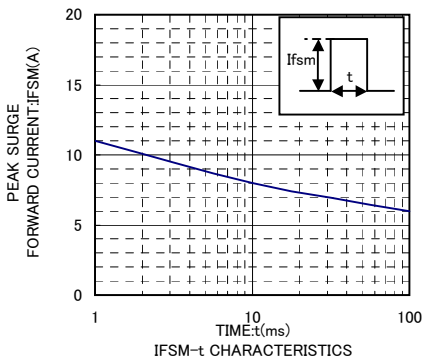
IFSM DISERSION MAP



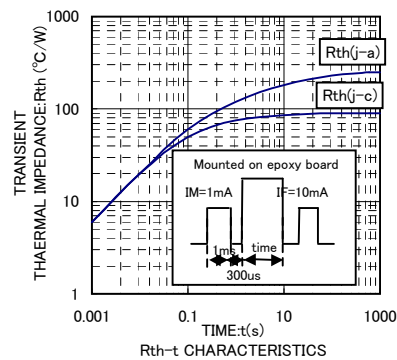
trr DISPERSION MAP



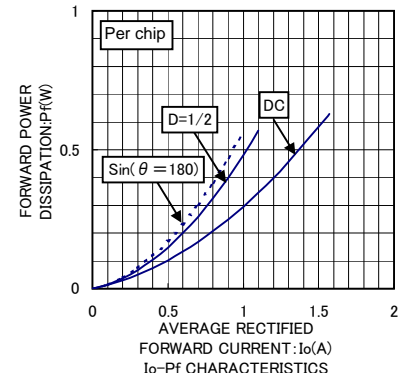
IFSM-CYCLE CHARACTERISTICS



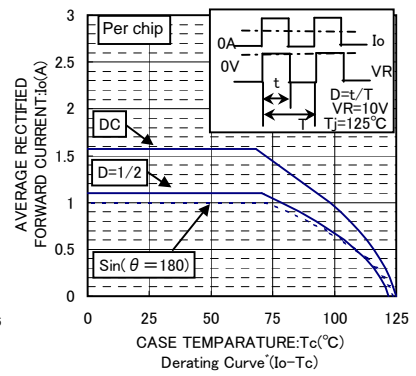
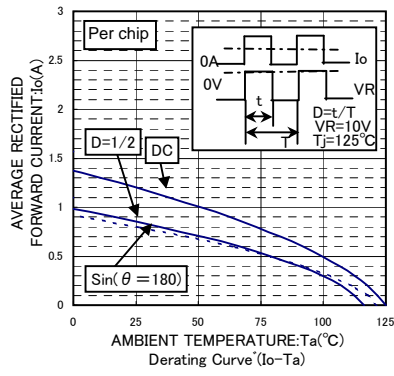
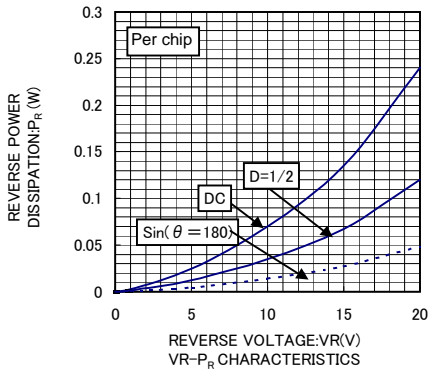
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS



Io-Pf CHARACTERISTICS



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