

## Schottky barrier diode

## RB550EA

## ● Applications

Low current rectification

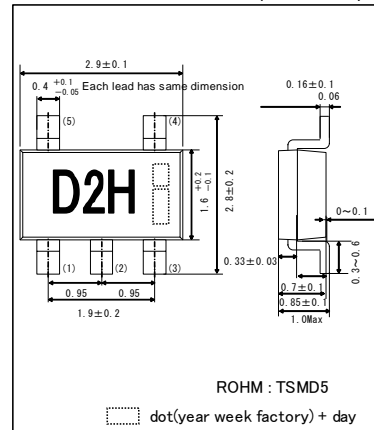
## ● Features

- 1) Small mold type. (TSMD5)
- 2) Low  $V_F$ , low  $I_R$ .
- 3) High reliability.

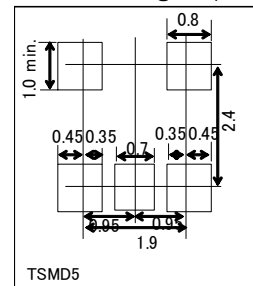
## ● Construction

Silicon epitaxial planar

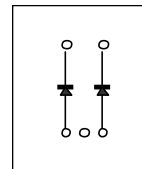
## ● External dimensions (Unit : mm)



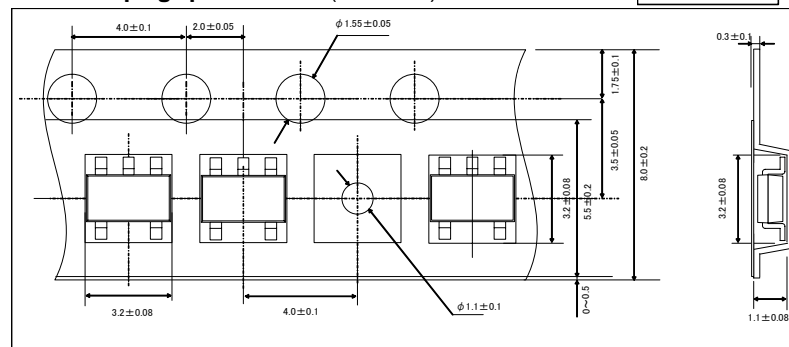
## ● Land size figure (Unit : mm)



## ● Structure



## ● Taping specifications (Unit : mm)

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

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current (*1)	$I_o$	0.7	A
Forward current surge peak ( $t=1\text{msec}$ )	$I_{FSM}$	12	A
Junction temperature	$T_j$	150	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40 to +150	$^\circ\text{C}$

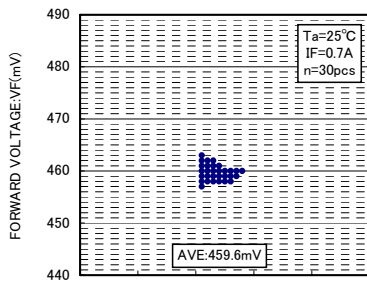
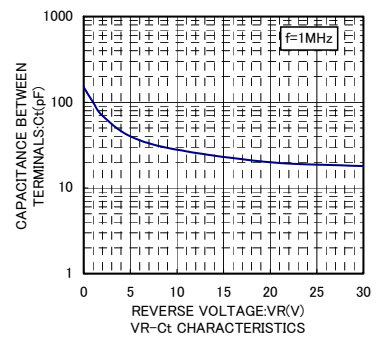
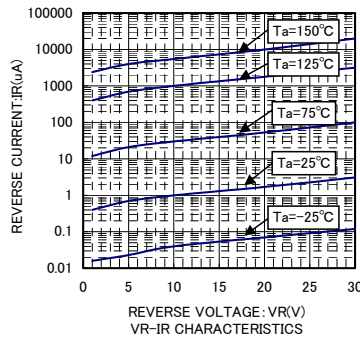
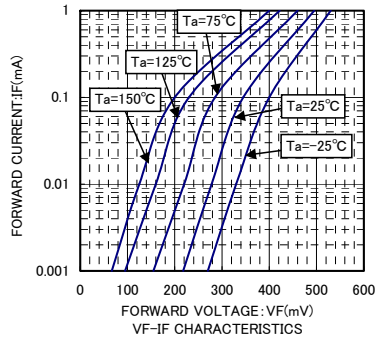
(\*1) Rating of per diode.

● Electrical characteristics ( $T_a=25^\circ\text{C}$ , Rating of per diode.)

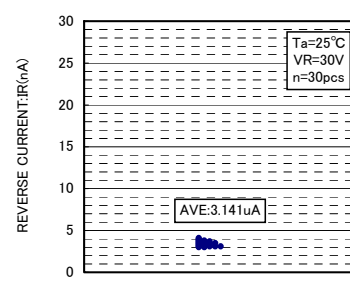
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_{F1}$	0.39	0.45	0.49	V	$I_F=0.7\text{A}$
Reverse current	IR1	-	1	30.00	$\mu\text{A}$	$V_R=10\text{V}$
	IR2	-	5.0	50	$\mu\text{A}$	$V_R=30\text{V}$
ESD break down voltage	ESD	15	-	-	KV	$C=100\text{pF}, R=1.5\text{K}\Omega$ Forward and reverse : 1 times

Diodes

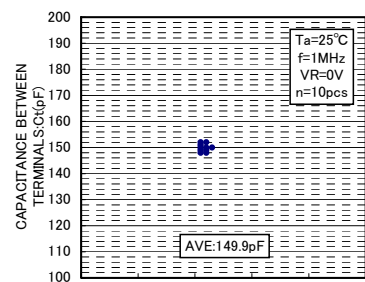
●Electrical characteristic curves (Ta=25°C)



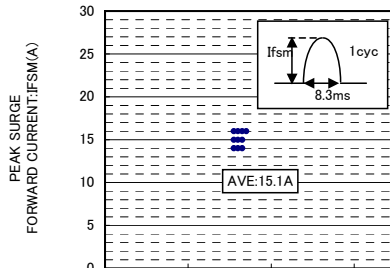
VF DISPERSION MAP



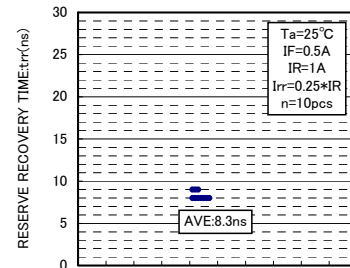
IR DISPERSION MAP



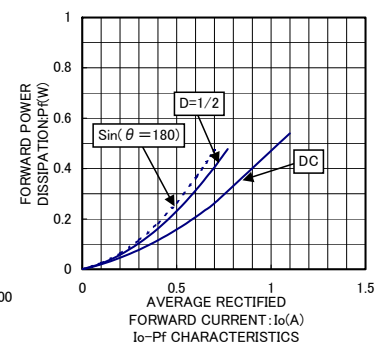
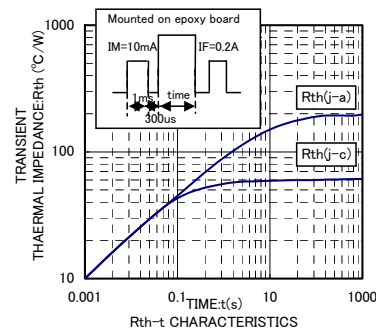
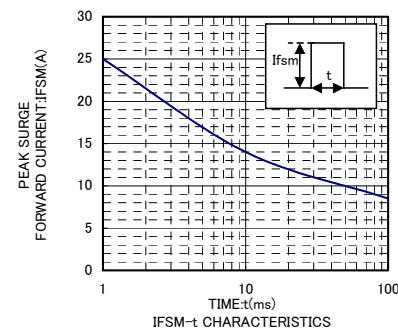
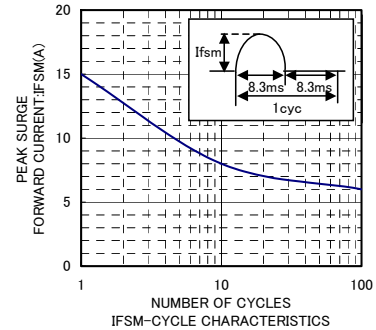
Ct DISPERSION MAP



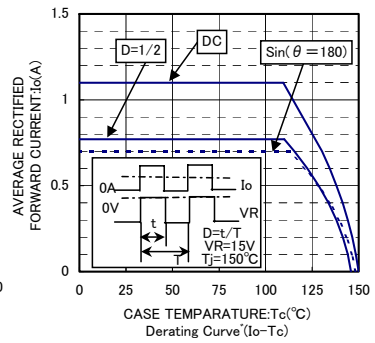
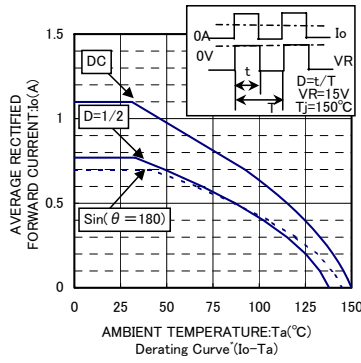
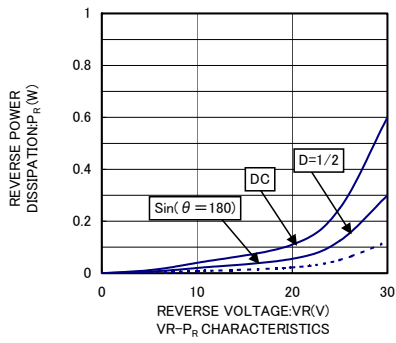
IFSM DISRESION MAP



trr DISPERSION MAP



Diodes



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