

Shottky barrier diode

RB420D

●Applications

Low current rectification

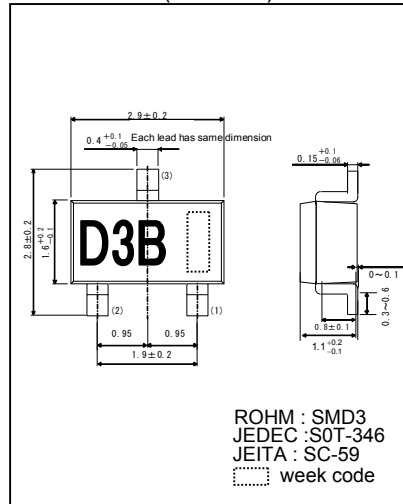
●Features

- 1) Small mold type. (SMD3)
- 2) Low I_R
- 3) High reliability.

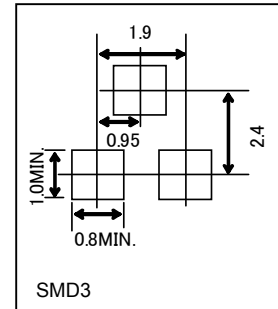
●Construction

Silicon epitaxial planar

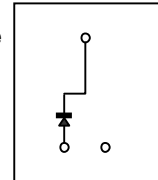
●Dimensions (Unit : mm)



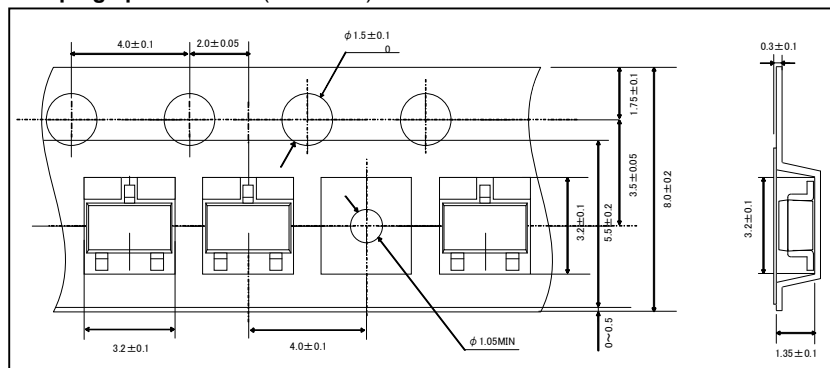
●Land size figure (Unit : mm)



●Structure



●Taping specifications (Unit : mm)



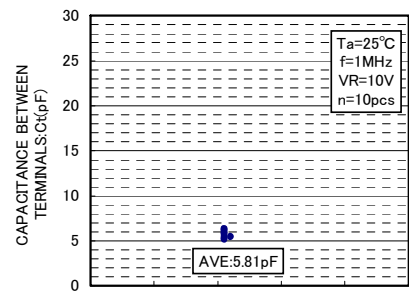
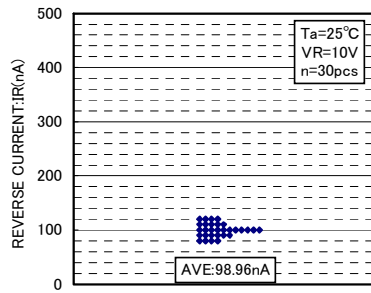
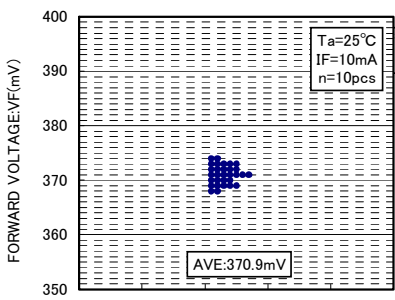
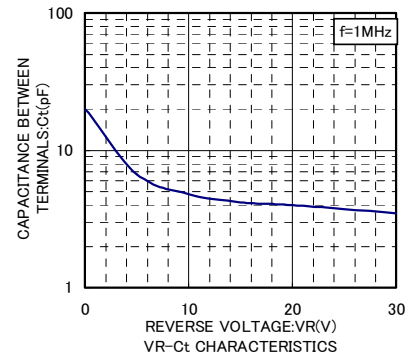
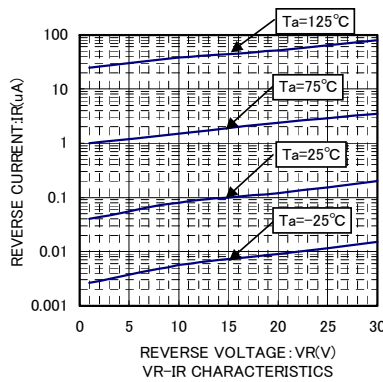
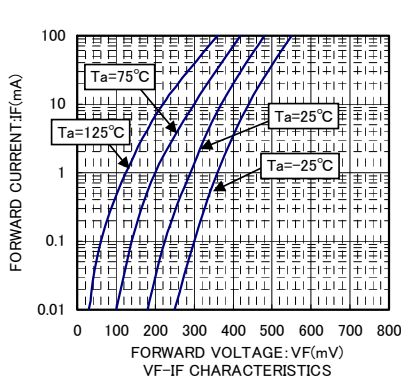
●Absolute maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Limits	Unit
Reverse voltage (repetitive peak)	V_{RM}	40	V
Reverse voltage (DC)	V_R	40	V
Average rectified forward voltage (*1)	I_o	100	mA
Forward current surge peak (60Hz·1cyc) (*1)	I_{FSM}	1	A
Junction temperature	T_j	125	$^\circ\text{C}$
Storage temperature	T_{stg}	-40 to +125	$^\circ\text{C}$

(*1) Rating of per diode

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

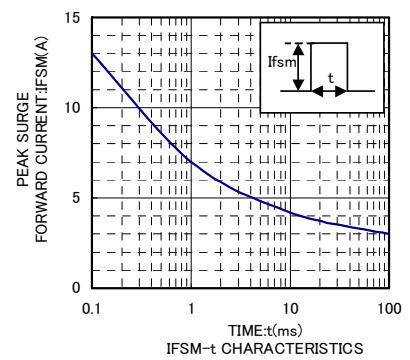
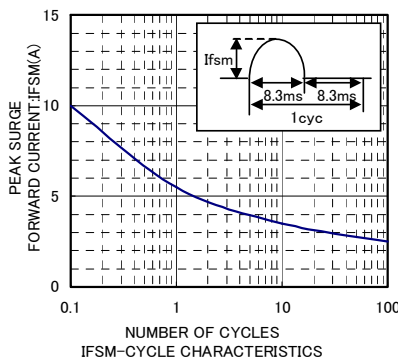
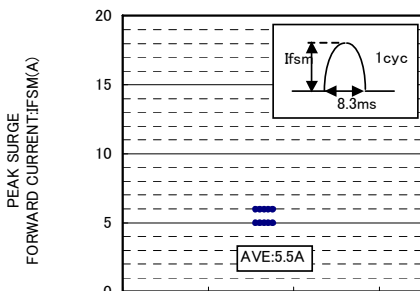
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_{F1}	-	-	0.45	V	$I_F=10\text{mA}$
Reverse current	I_{R1}	-	-	1	μA	$V_R=10\text{V}$
Capacitance between terminals	C_{t1}	-	6	-	pF	$V_R=10\text{V}$, $f=1\text{MHz}$



VF DISPERSION MAP

IR DISPERSION MAP

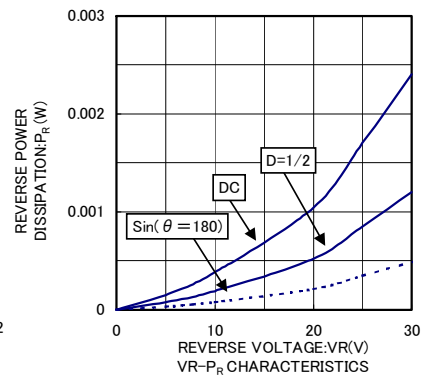
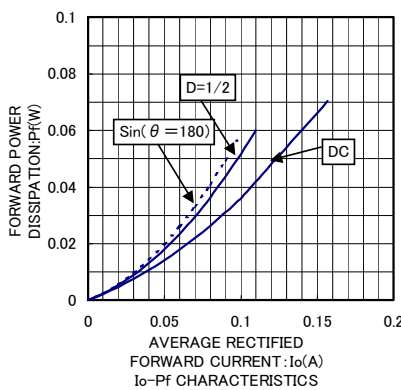
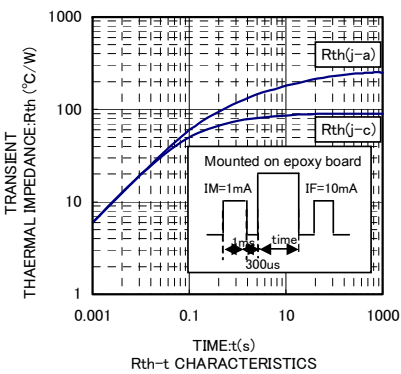
Ct DISPERSION MAP



IFSM DISREION MAP

IFSM-CYCLE CHARACTERISTICS

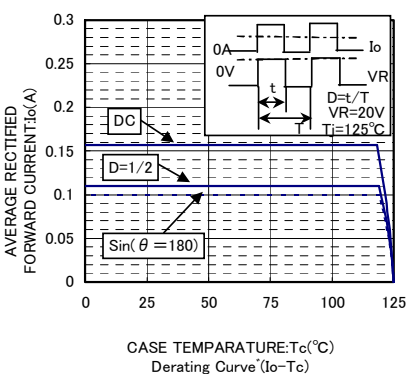
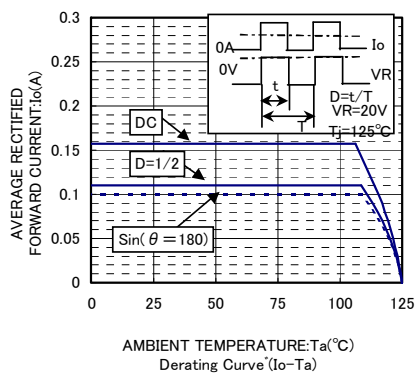
IFSM-t CHARACTERISTICS



Rth-t CHARACTERISTICS

Io-Pf CHARACTERISTICS

VR-PR CHARACTERISTICS



Notes

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