

# SCHOTTKY BARRIER DIODE Dimensions SOD-523

## ●Applications

Low current rectification and high speed switching

## ●Features

Extremely small surface mounting type. (SOD523)

High reliability

Low  $I_R$ .

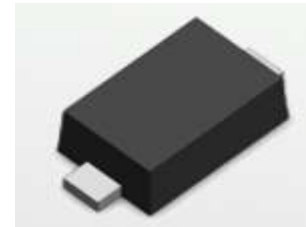
## ●Construction

Silicon epitaxial planar

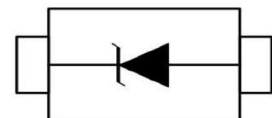
- We declare that the material of product compliance with RoHS requirements.

Ordering Information

Device	Marking	Shipping
RB520S-40	D	3000/Tape&Reel



## Pin Configuration



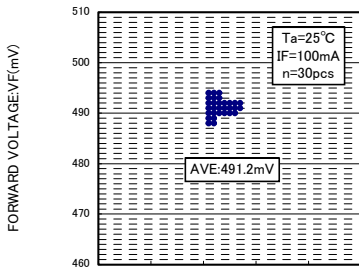
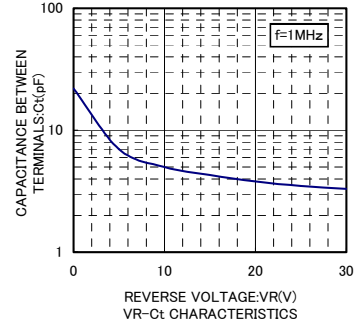
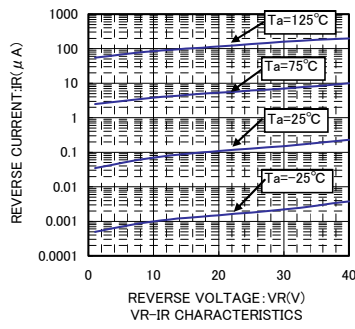
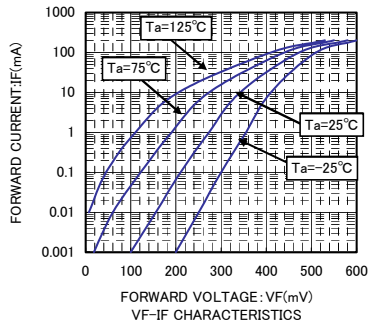
## MAXIMUM RATINGS ( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Limits	Unit
Reverse voltage(repetitive peak)	$V_R$	40	V
DC reverse voltage	$V_R$	40	V
Average rectified forward current	$I_O$	200	mA
Peak forward surge current	$I_{FSM}$	1	A
Junction temperature	$T_j$	125	$^\circ\text{C}$
Storage temperature	$T_{stg}$	-40~+125	$^\circ\text{C}$

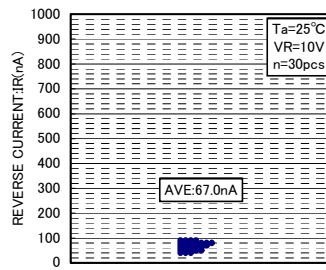
## ELECTRICAL CHARACTERISTICS( $T_A = 25^\circ\text{C}$ )

Parameter	Symbol	Min.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	0.39	V	$I_F = 10\text{mA}$
Forward voltage	$V_F$	-	0.55	V	$I_F = 100\text{mA}$
Reverse current	$I_R$	-	1	$\mu\text{A}$	$V_R = 10\text{V}$
Reverse current	$I_R$	-	10	$\mu\text{A}$	$V_R = 40\text{V}$

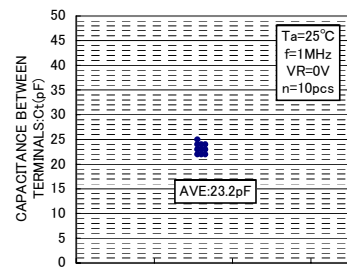
●Electrical characteristic curves



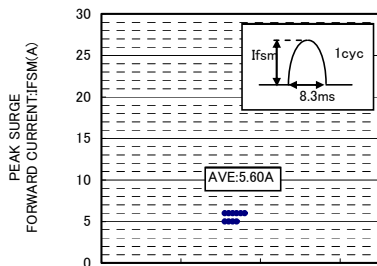
VF DISPERSION MAP



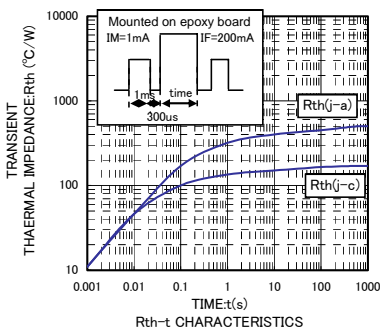
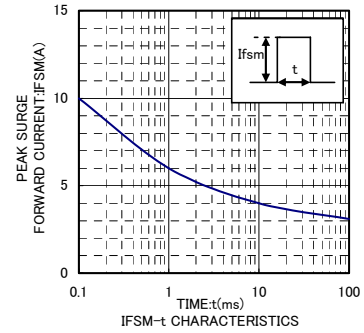
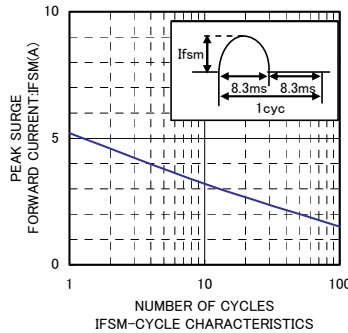
IR DISPERSION MAP



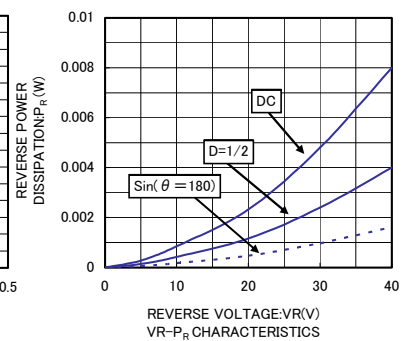
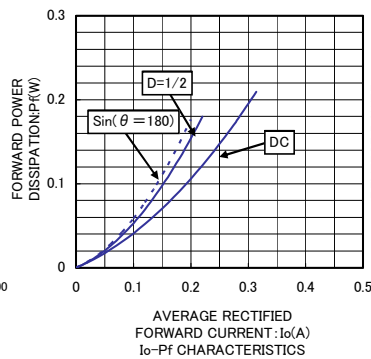
Ct DISPERSION MAP

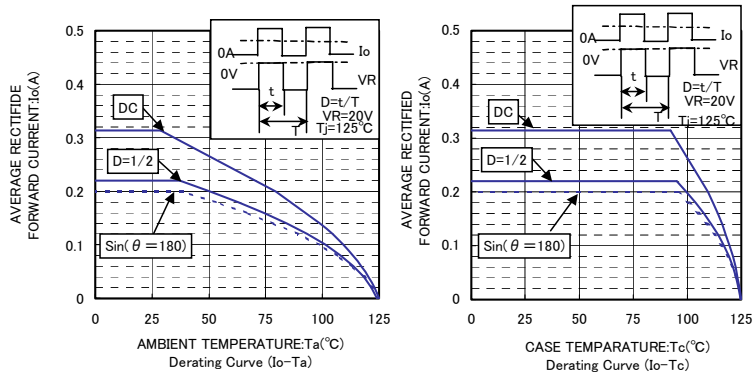


IFSM DISPERSION MAP

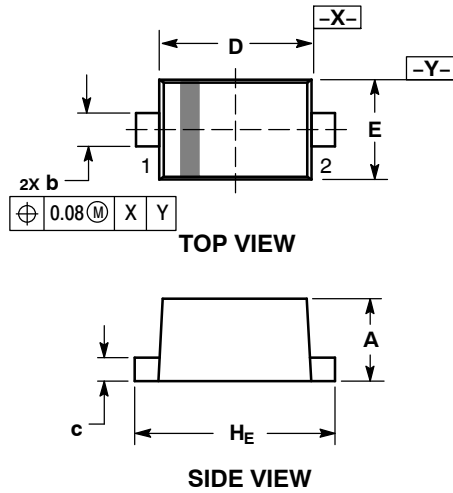


Rth-t CHARACTERISTICS





## SOD-523



NOTES:

- CONTROLLING DIMENSION: MILLIMETERS.
- MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH.

BASE MATERIAL:

TRUSIONS, OR GATE BURRS.

DIM	MILLIMETERS		
	MIN	NOM	MAX
A	0.50	0.60	0.70
b	0.25	0.30	0.35
c	0.07	0.14	0.20
D	1.10	1.20	1.30
E	0.70	0.80	0.90
H <sub>E</sub>	1.50	1.60	1.70
L	0.30 REF		
L2	0.15	0.20	0.25

### RECOMMENDED SOLDERING FOOTPRINT\*

