



## DESCRIPTION

Silicon epitaxial planar.

The RB521S-30 is available in SOD-523 Package.

## ORDERING INFORMATION

Package Type	Part Number
SOD-523	RB521S-30
Note	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

## FEATURES

- Extremely small surface mounting type
- Extremely Fast Switching Speed
- Extremely Low Forward Voltage:  
0.5V (max) @ $I_F = 200\text{mA}$
- Low Reverse Current
- Available in SOD-523 Package

## PIN DESCRIPTION



## APPLICATIONS

- Low current rectification and high speed switching



## ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$

$V_R$ , DC reverse voltage	30V
$I_O$ , Mean rectifying current	200mA
$I_{FSM}$ , Peak forward surge current <sup>NOTE1</sup>	1A
$T_J$ , Junction temperature	125°C
$T_{STG}$ , Storage temperature	-40°C ~ +125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1: 60Hz for 1cycle.

## ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

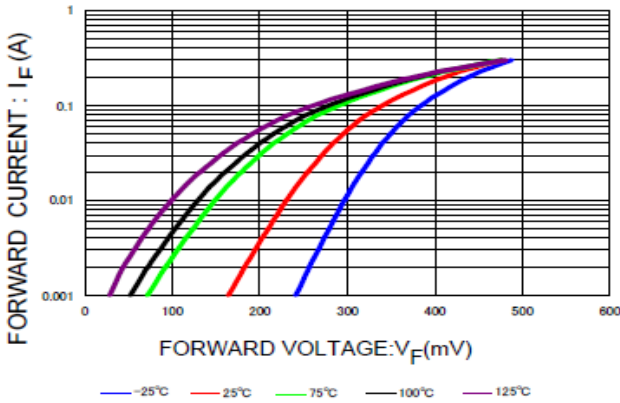
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	$V_F$	$I_F = 200\text{mA}$	-	-	0.50	V
Reverse current	$I_R$	$V_R = 10\text{V}$	-	-	30	$\mu\text{A}$



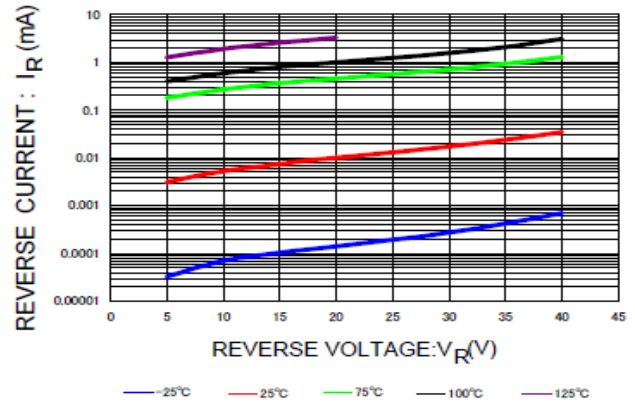
## TYPICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

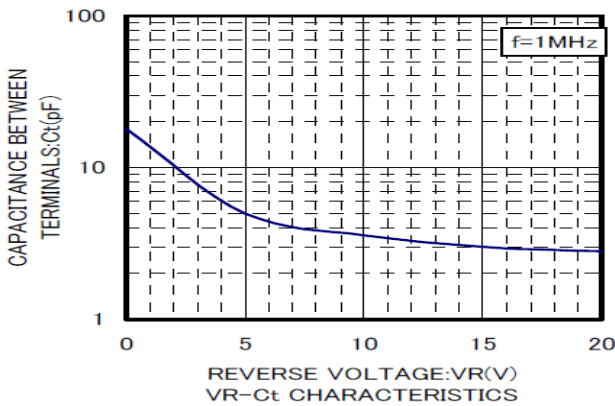
### 1. Forward characteristics



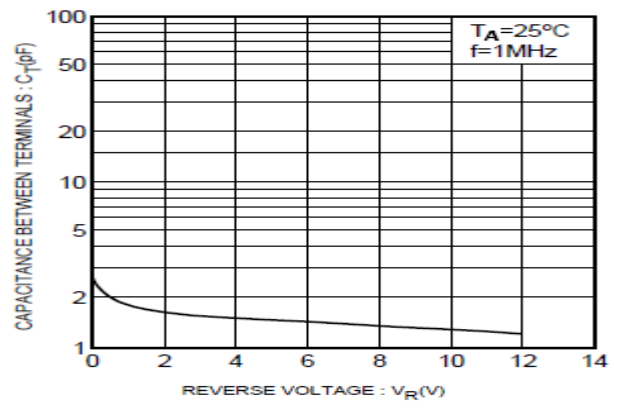
### 2. Reverse characteristics



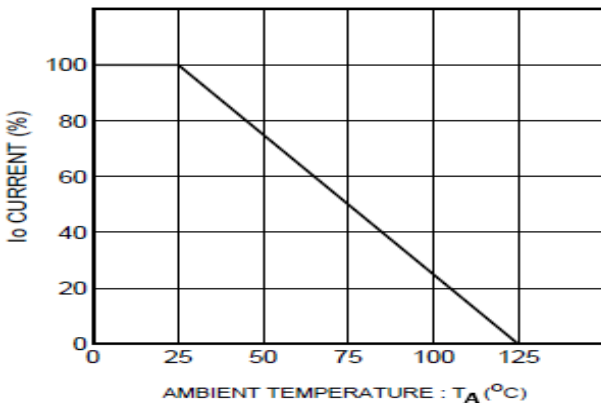
### 3.



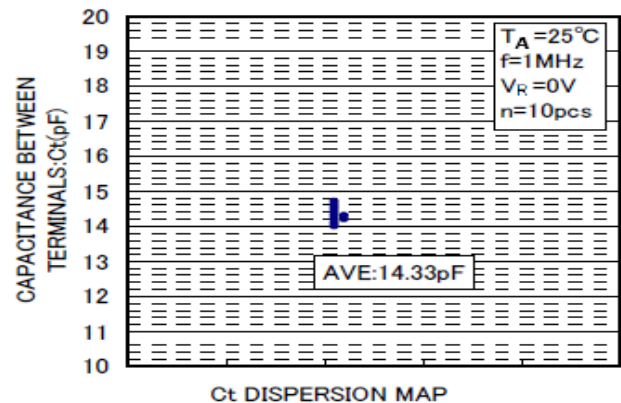
### 4. Capacitance between terminals characteristics



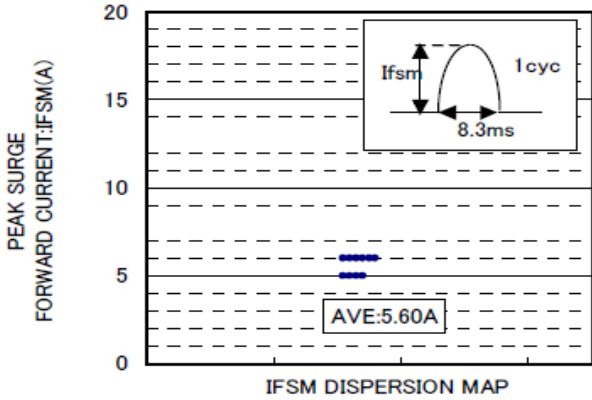
### 5. Derating curve (mounting on glass epoxy PCBs)



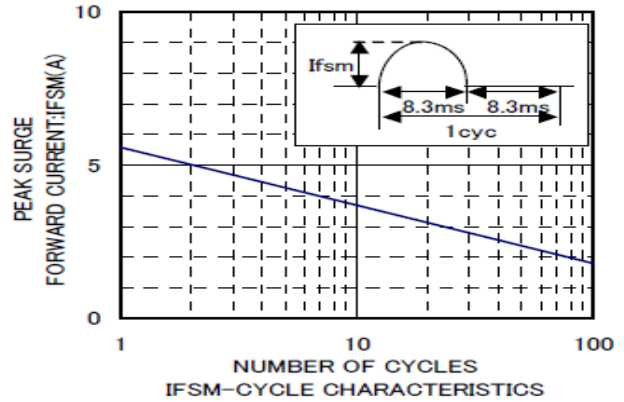
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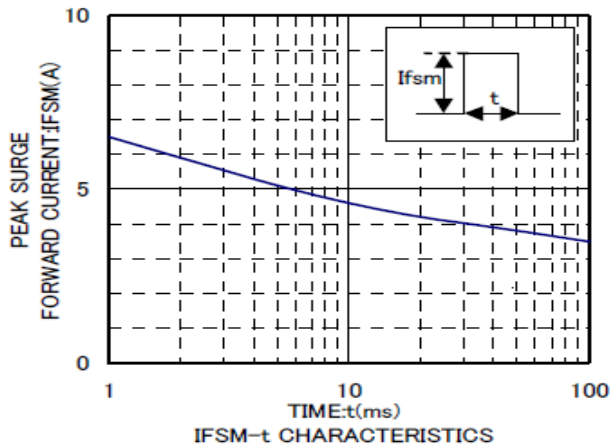
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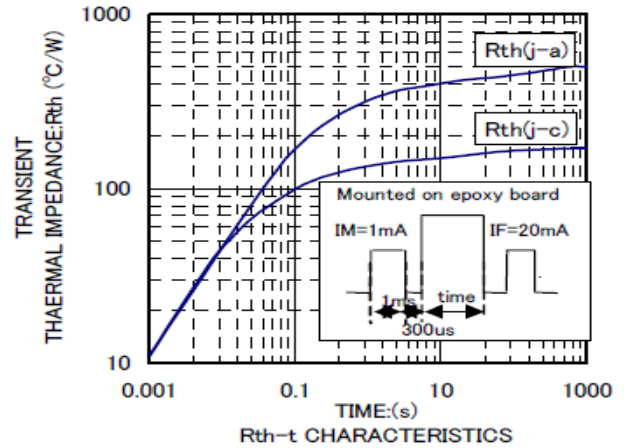
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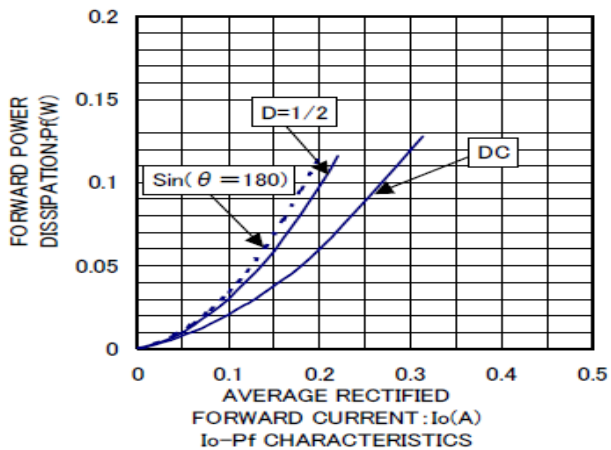
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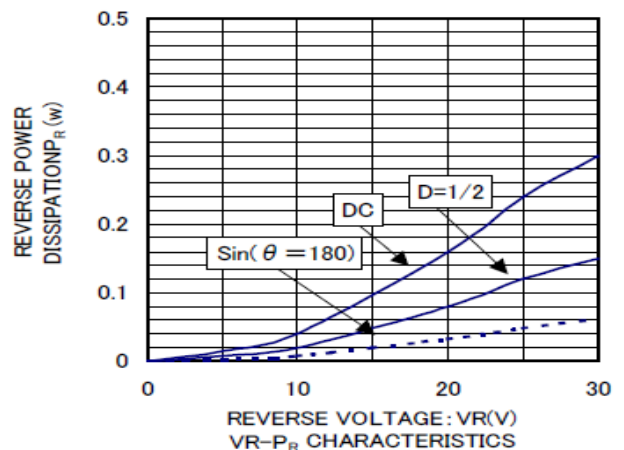
10.



11.



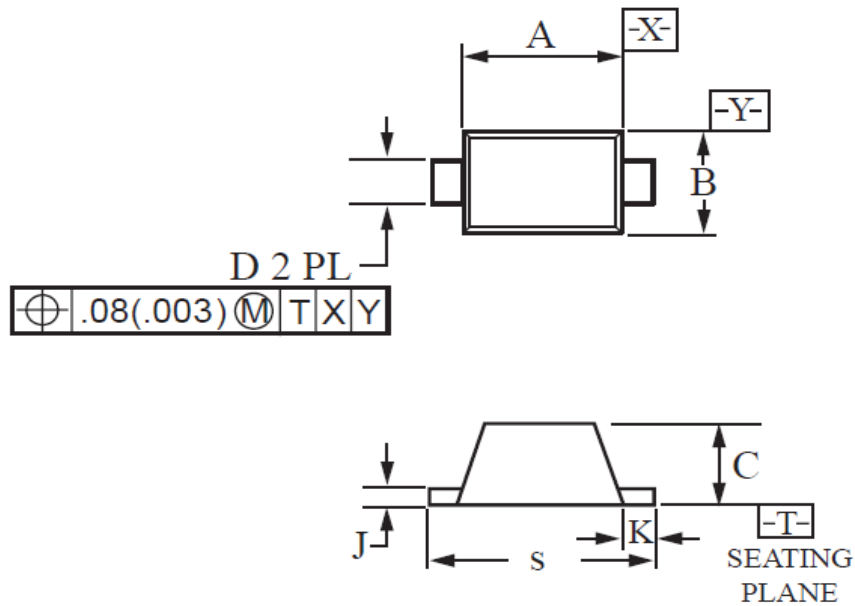
12.





**PACKAGE INFORMATION**

Dimension in SOD-523 Package (Unit: mm)



DIM	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	0.50	0.70	0.020	0.028
D	0.25	0.35	0.010	0.014
J	0.07	0.20	0.0028	0.0079
K	0.15	0.25	0.006	0.010
S	1.50	1.70	0.059	0.067



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