



DESCRIPTION

Silicon epitaxial planar

The RB520S-30 is available in SOD-523 (SC-79) Package.

FEATURES

- Extremely small surface mounting type.
- Extremely Fast Switching Speed
- Extremely Low Forward Voltage
0.6V(max) @ $I_F = 200\text{mA}$
- Low Reverse Current
- Available in SOD-523 (SC-79) Package

ORDERING INFORMATION

Package Type	Part Number
SOD-523 (SC-79)	RB520S-30
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

APPLICATIONS

- Low current rectification and high speed switching

PIN DESCRIPTION





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	1A
P_D , Total Power Dissipation @ $T_A=25^\circ\text{C}$ Derate Above 25°C	150mW 1.2mW/ $^\circ\text{C}$
R_{JA} , Thermal Resistance, Junction to Ambient	833 $^\circ\text{C}/\text{W}$
T_J , Junction temperature	125 $^\circ\text{C}$
T_{STG} , Storage temperature	-40 $^\circ\text{C} \sim +125^\circ\text{C}$

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.

ELECTRICAL CHARACTERISTICS

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

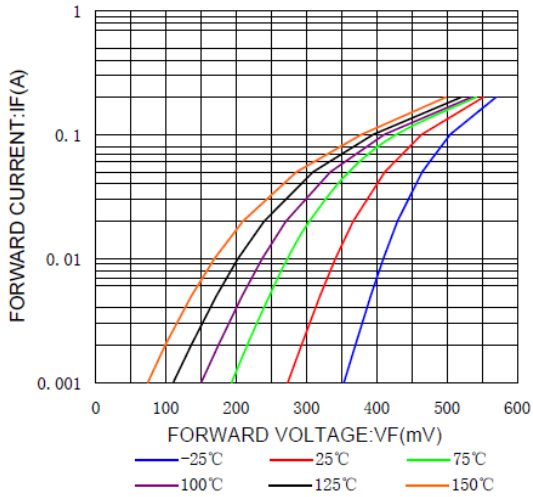
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 200\text{mA}$	-	-	0.60	V
Reverse Current	I_R	$V_R = 10\text{V}$	-	-	1.0	μA



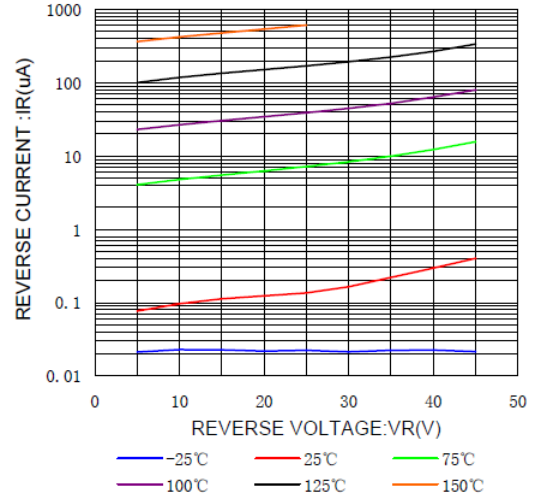
TYPICAL CHARACTERISTICS

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

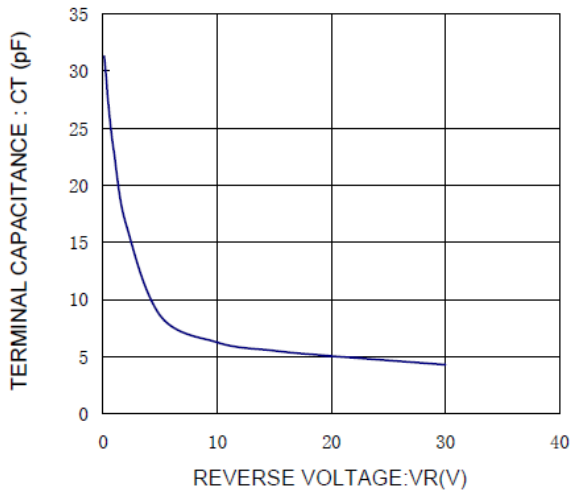
1. Forward Characteristics



2. Reverse Characteristics



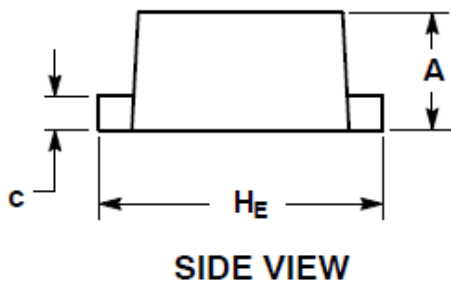
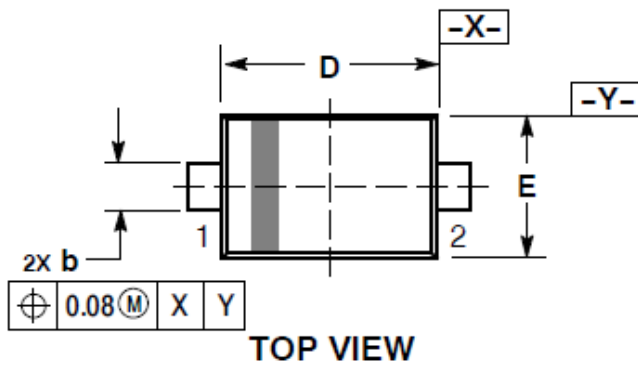
3. V_R - C_T Characteristics



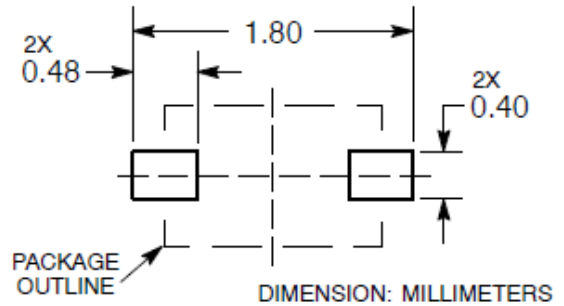


PACKAGE INFORMATION

Dimension in SOD-523 Package (Unit: mm)



RECOMMENDED SOLDERING FOOTPRINT*



DIM	MIN	MAX
A	0.50	0.70
b	0.25	0.35
c	0.07	0.20
D	1.10	1.30
E	0.70	0.90
H _E	1.50	1.70
L	0.30 REF	
L2	0.15	0.25



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