

### SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

#### Features

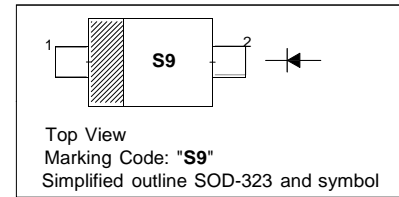
- Small surface mounting type
- Low  $I_R$
- High reliability

#### Applications

- Low current rectification

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



#### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	$V_{RM}$	45	V
Power Dissipation	$P_{tot}$	200	mW
Reverse Voltage	$V_R$	40	V
Mean Rectifying Current	$I_O$	0.1	A
Peak Forward Surge Current (60 Hz for 1 Cyc.)	$I_{FSM}$	1	A
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$	- 40 to + 125	$^\circ\text{C}$

#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	45	-	-	V
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	-	-	0.45	V
Reverse Current at $V_R = 10\text{ V}$	$I_R$	-	-	1	$\mu\text{A}$
Capacitance Between Terminals at $V_R = 10\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	-	6	-	pF

Note: ESD sensitive product handling required.



**CHINA BASE**  
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**SOD-323**



**RB500V-40**

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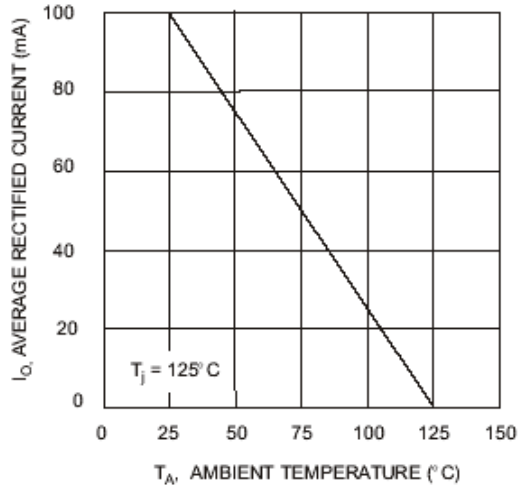


Fig. 1 Forward Current Derating Curve

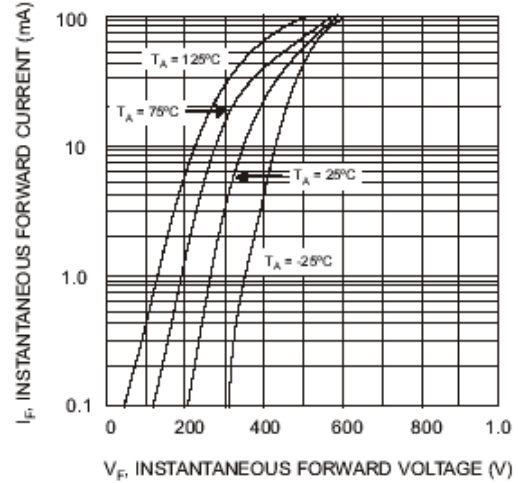


Fig. 2 Typical Forward Characteristics

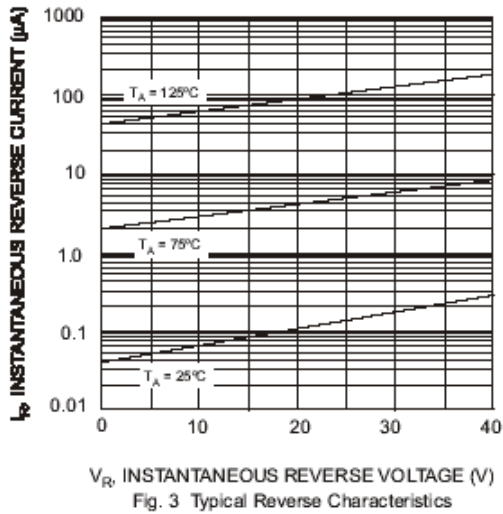


Fig. 3 Typical Reverse Characteristics

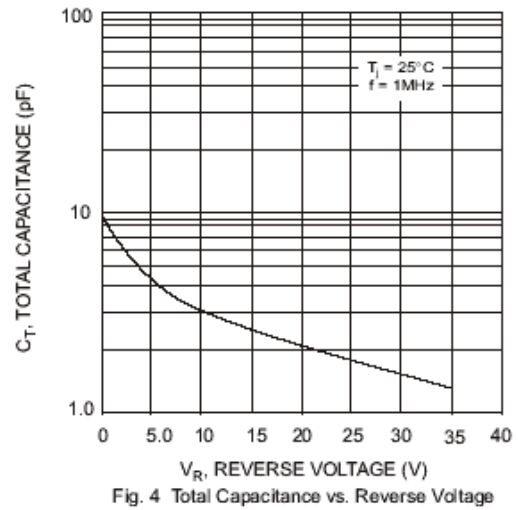


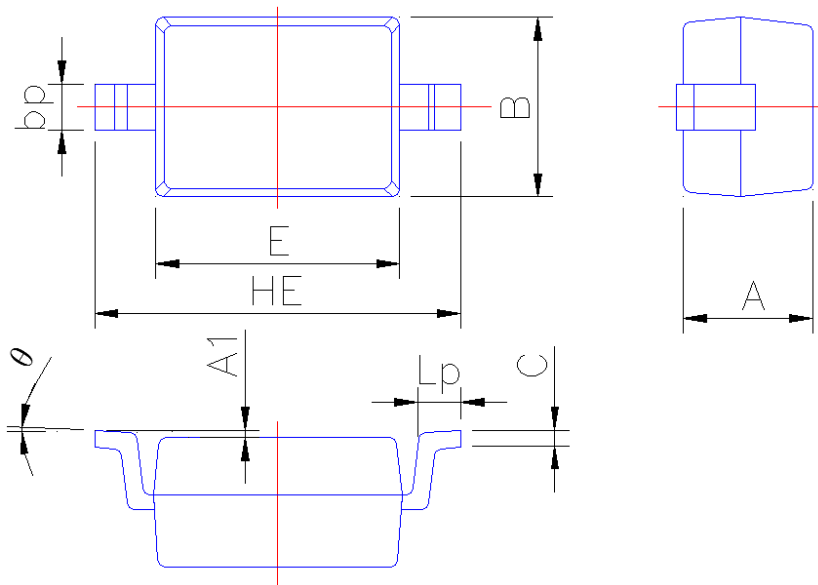
Fig. 4 Total Capacitance vs. Reverse Voltage



## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.95	1.15
A1	0.010	0.100
B	1.20	1.40
bp	0.25	0.40
C	0.09	0.150
E	1.60	1.80
HE	2.30	2.70
Lp	0.20	0.40
θ	0°	5°