

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

Features

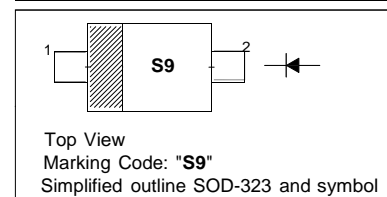
- Small surface mounting type
- Low I_R
- High reliability

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	μA
Capacitance Between Terminals at $V_R = 10\text{ V}$, $f = 1\text{ MHz}$	C_T	-	6	-	pF

Note: ESD sensitive product handling required.

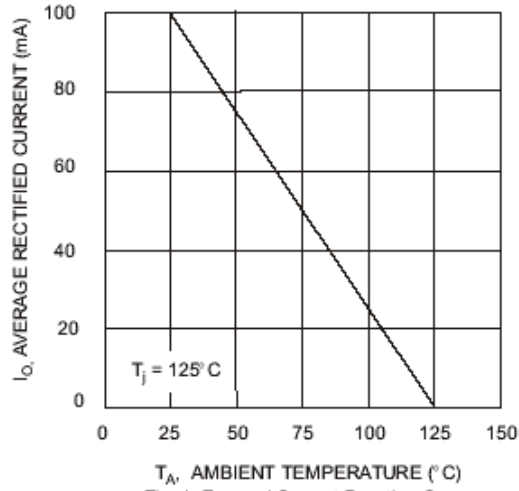


Fig. 1 Forward Current Derating Curve

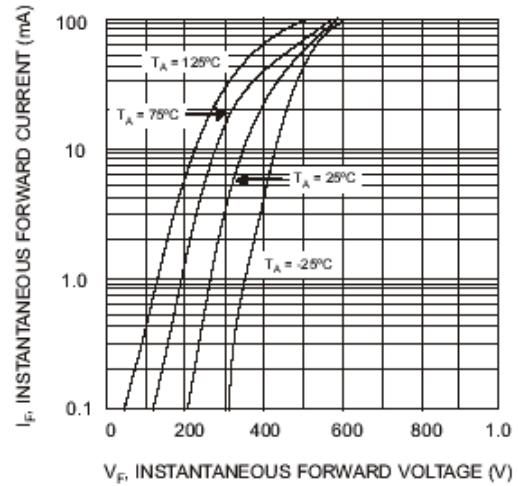


Fig. 2 Typical Forward Characteristics

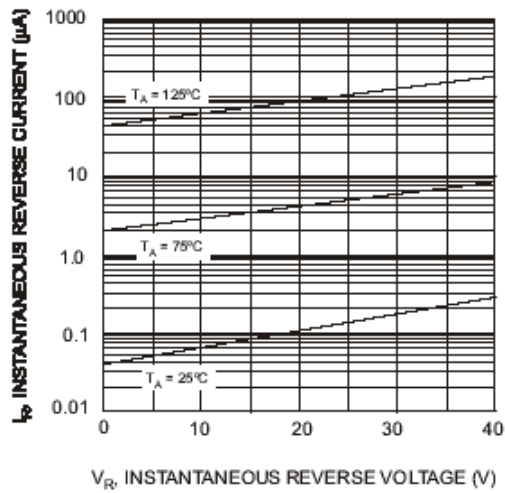


Fig. 3 Typical Reverse Characteristics

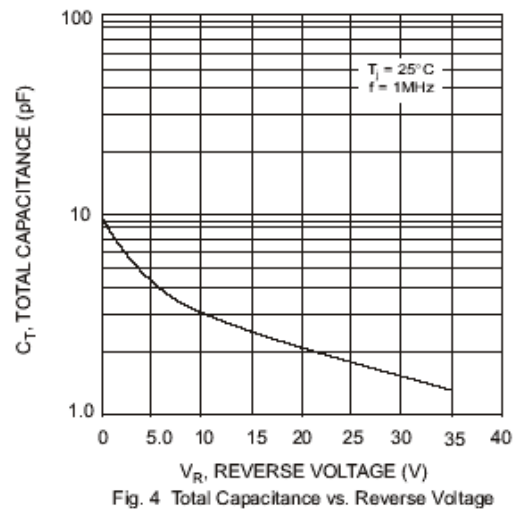


Fig. 4 Total Capacitance vs. Reverse Voltage



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SOD-323



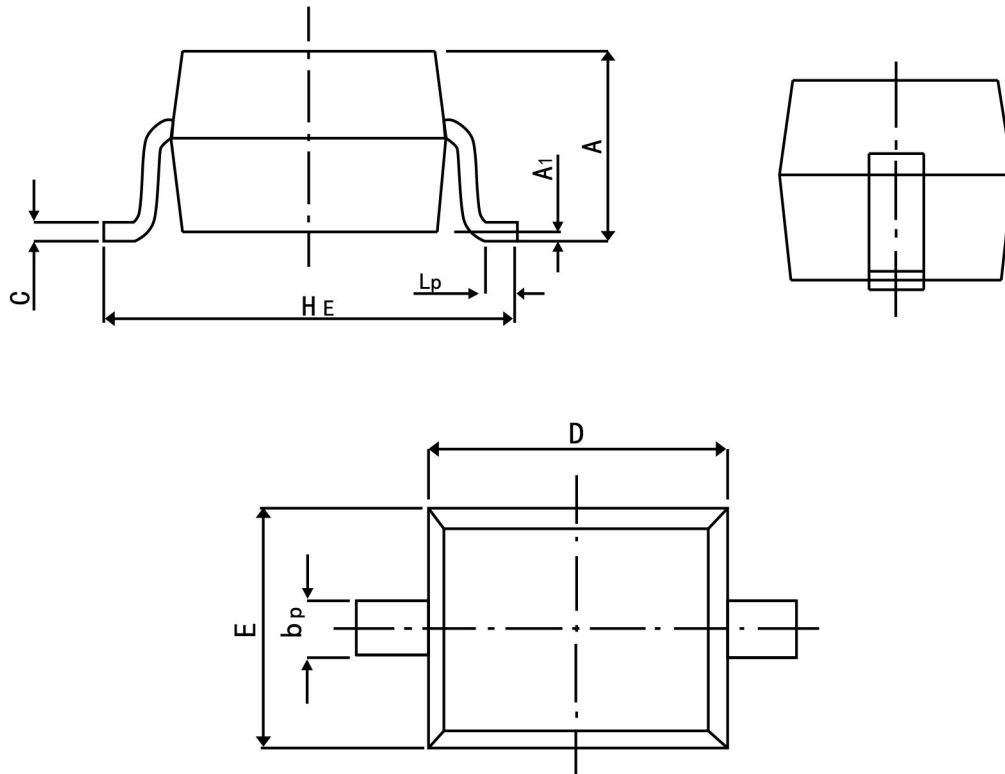
RB500V-40

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PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Symbol	Dimension in Millimeters	
	Min	Max
A	0.90	1.20
bp	0.25	0.40
C	0.10	0.15
D	1.60	1.80
E	1.15	1.35
HE	2.30	2.80
A1	0.01	0.10
Lp	0.20	0.50