RB500V-40

SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

Features

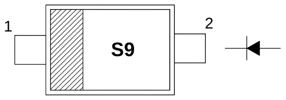
- Small surface mounting type
- Low I_R
- High reliability

Applications

- Low current rectification

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "**S9**"
Simplified outline SOD-323 and symbol

Absolute Maximum Ratings (T_a = 25 °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	°C
Storage Temperature Range	T_s	- 40 to + 125	°C

Characteristics at T_a = 25°C

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

Note: ESD sensitive product handling required.

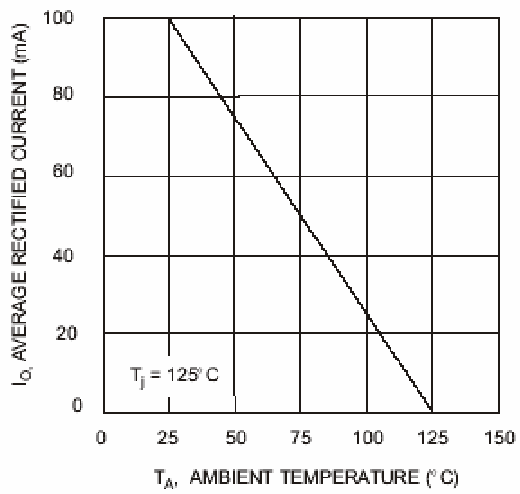


Fig. 1 Forward Current Derating Curve

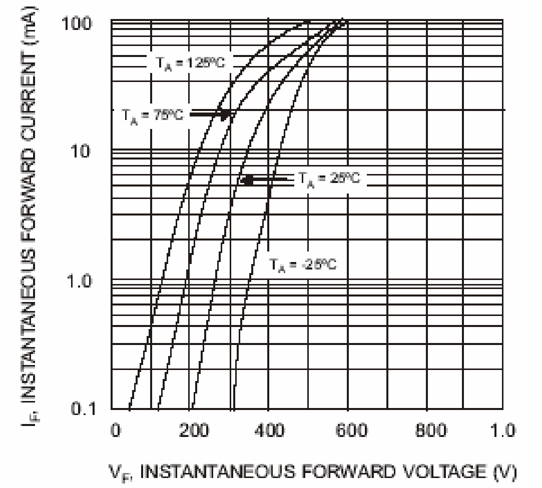


Fig. 2 Typical Forward Characteristics

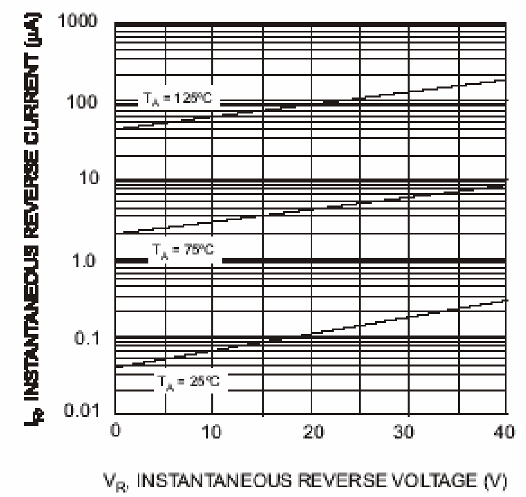


Fig. 3 Typical Reverse Characteristics

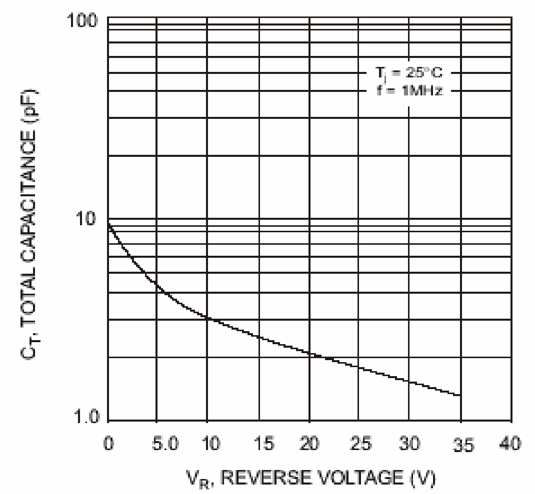
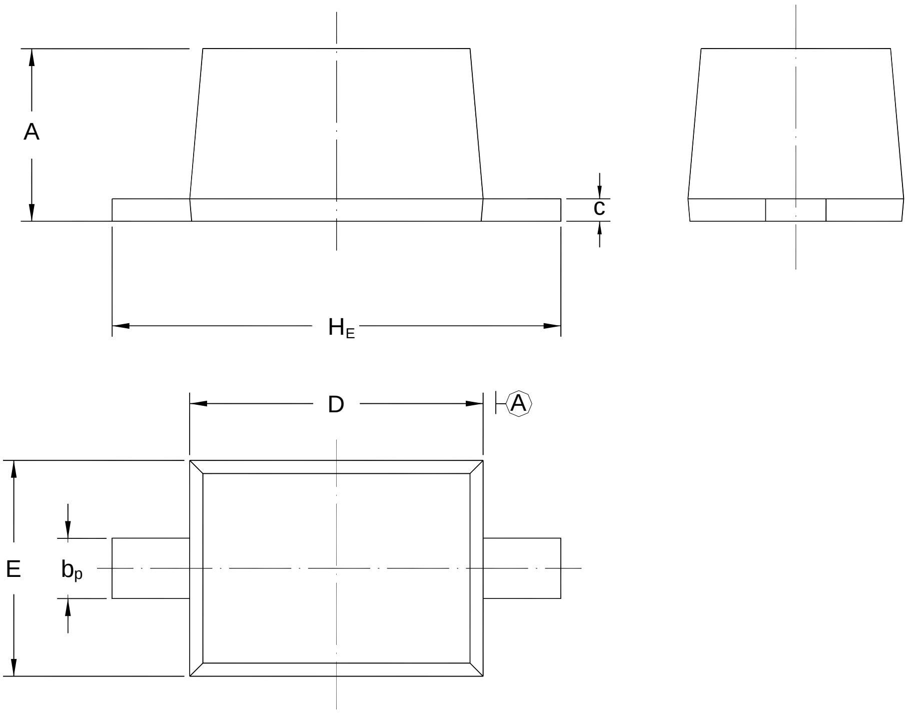


Fig. 4 Total Capacitance vs. Reverse Voltage

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads **SOD-323**



UNIT	A	b_p	C	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30