

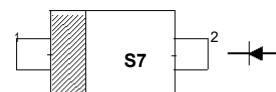
RB501V-40 SILICON EPITAXIAL PLANAR SCHOTTKY BARRIER DIODE

Features

- Small surface mounting type
- High reliability

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code: "S7"
Simplified outline SOD-123 and symbol

Applications

- Low current rectification

MARKING:S7

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

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V_{RM}	45	V
Reverse Voltage	V_R	40	V
Mean Rectifying Current	I_0	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 $T_a = 25^\circ\text{C}$

Parameter	Symbol	Typ.	Max.	Unit
Forward Voltage at $I_F = 100 \text{ mA}$	V_F	-	0.55	V
at $I_F = 10 \text{ mA}$	V_F	-	0.34	V
Reverse Current at $V_R = 10 \text{ V}$	I_R	-	30	μA
Capacitance Between Terminals at $V_R = 10 \text{ V}, f = 1 \text{ MHz}$	C_T	6	-	pF

Note: ESD sensitive product handling required.

Typical Characteristics

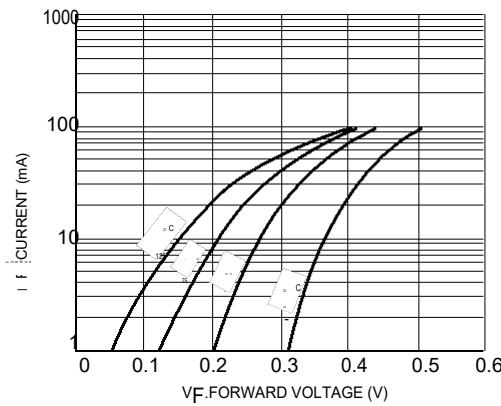


Figure 1 Forward characteristics

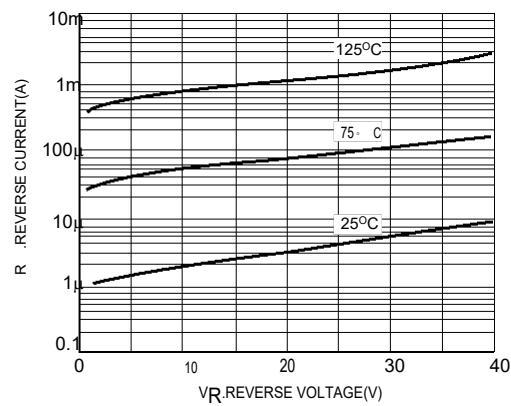


Figure 2 Reverse characteristics

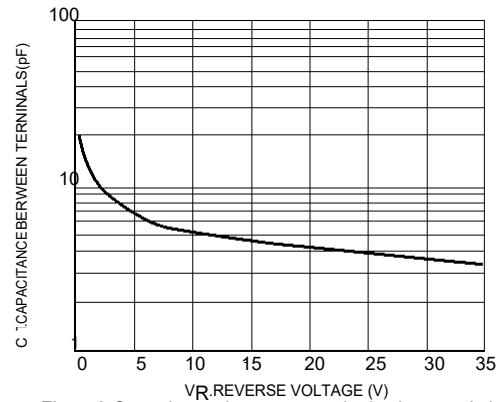


Figure 3 Capacitance between terminals characteristics

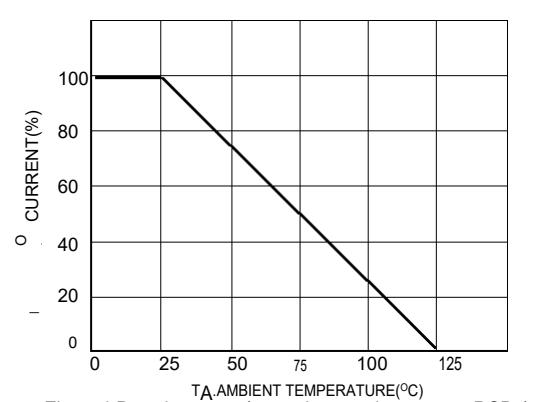
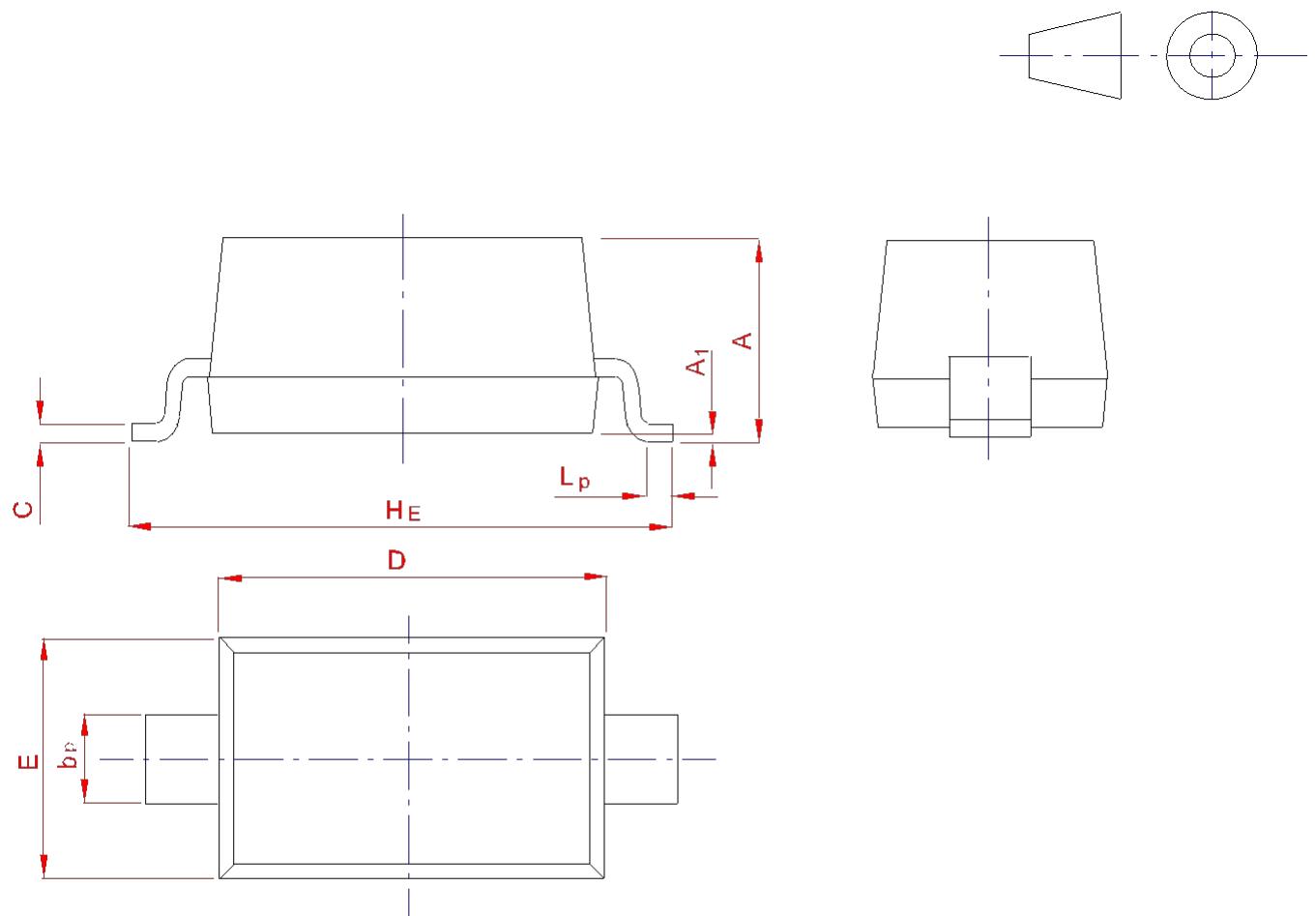


Figure 4 Derating curve(mounting on glass epoxy PCBs)

PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	C	D	E	H _E	A ₁	L _p
mm	1.20 0.90	0.60 0.50	0.135 0.100	2.75 2.55	1.65 1.55	3.85 3.55	0.10 0.01	0.50 0.20