

# SCHOTTKY BARRIER DIODES

## FEATURES

- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- Surface mount device type

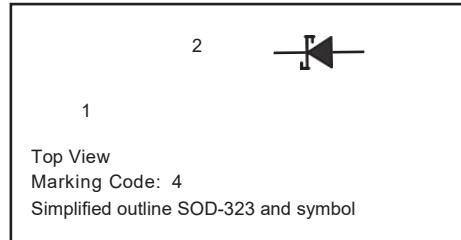
## PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



## MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 5.48mg / 0.00019oz

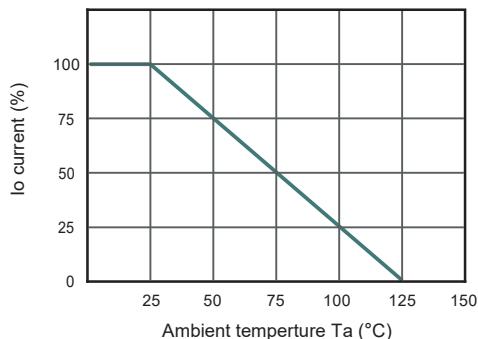


## Maximum Ratings and Electrical characteristics

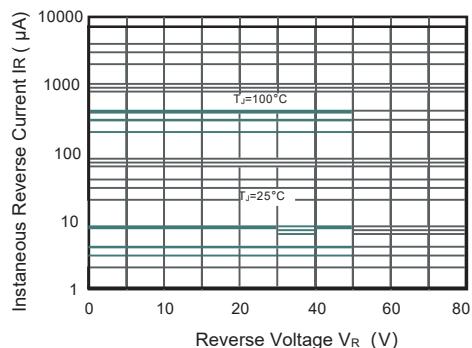
Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	RB501V-40	Units
Maximum recurrent peak reverse voltage	$V_{RM}$	45	V
DC reverse voltage	$V_R$	40	V
Continuous forward current	$I_O$	0.1	A
Reverse Leakage Current	$I_R$	30 @ $V_R=10V$	uA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	13	A
Maximum Forward Voltage	$V_F$	0.34 @ $I_F=10mA$ 0.55 @ $I_F=100mA$	V
Capacitance between terminals $V_R=10V, f=1MHz$	$C_T$	6	pF
Junction Temperature	$T_j$	125	°C
Storage Temperature	$T_{stg}$	-55 ~ +150	°C

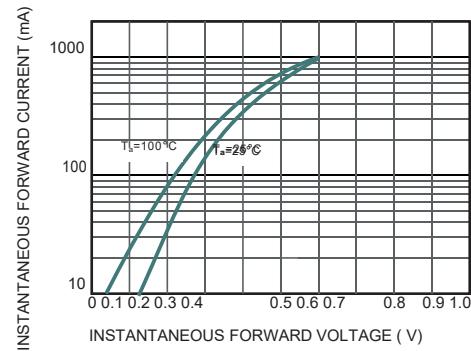
**Fig.1 Derating curve**



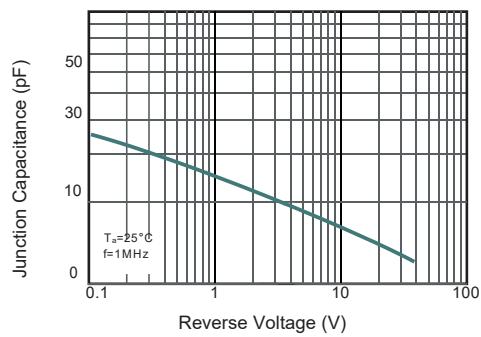
**Fig.2 Typical Reverse Characteristics**



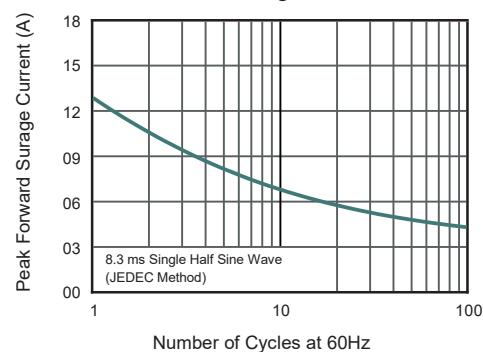
**Fig.3 TYPICAL FORWARD VOLTAGE**



**Fig.4 Typical Junction Capacitance**



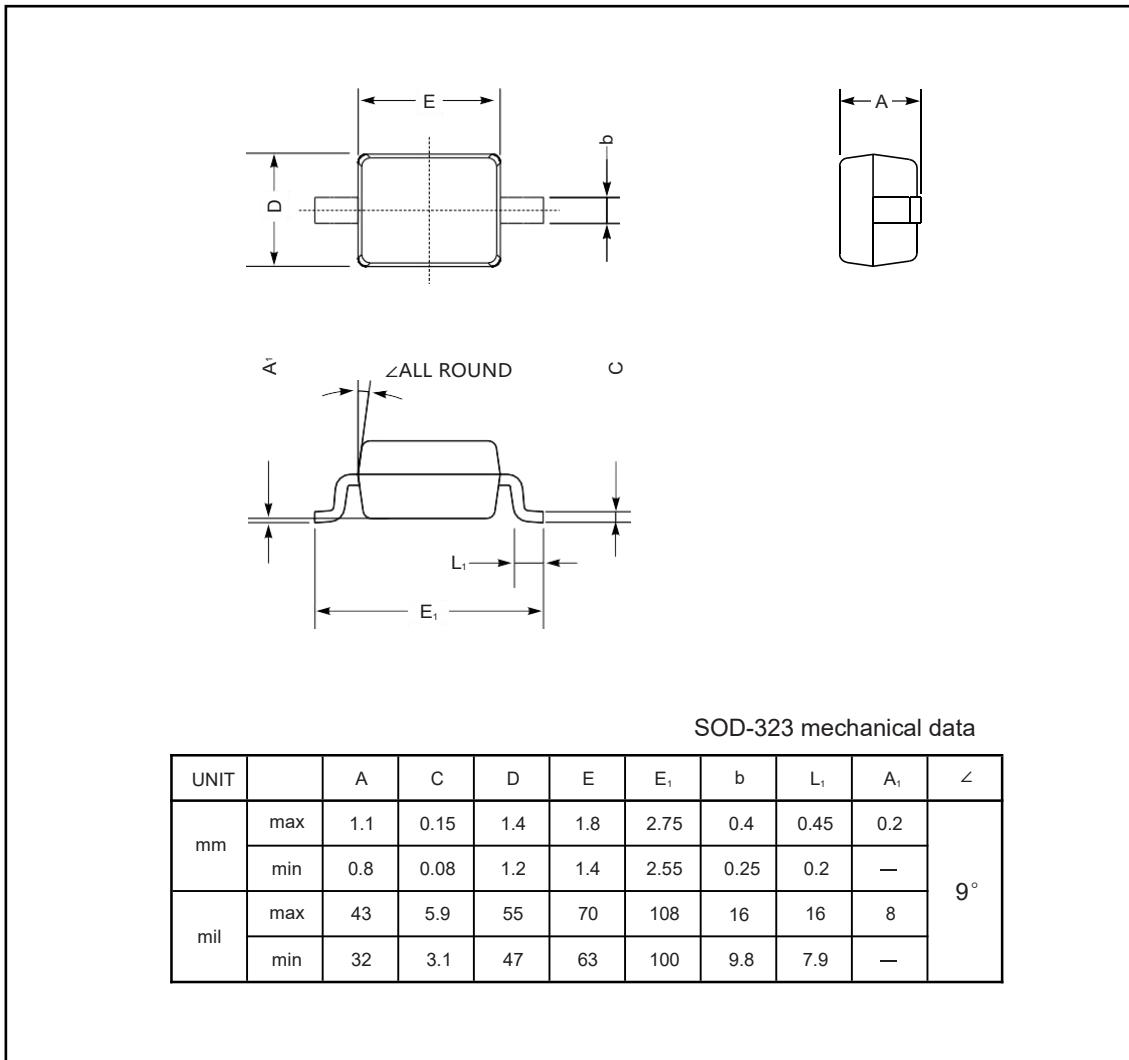
**Fig.5 Maximum Non-Repetitive Peak Forward Surge Current**



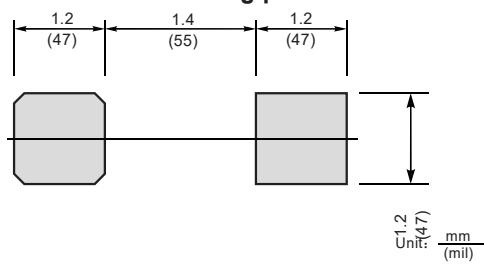
## PACKAGE OUTLINE

Plastic surface mounted package; 2leads

SOD-323



## The recommended mounting pad size



## Marking

Type number	Marking code
RB501V-40AT	4