

SCHOTTKY BARRIER DIODES

FEATURES

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

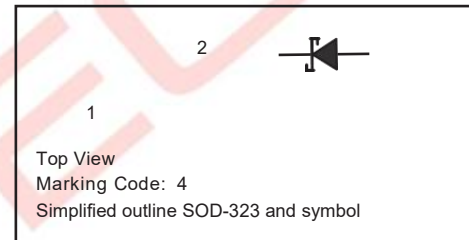
PINNING

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 @ $V_R=10V$	μA
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

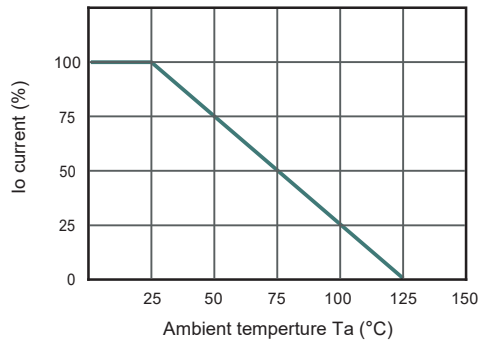


Fig.2 Typical Reverse Characteristics

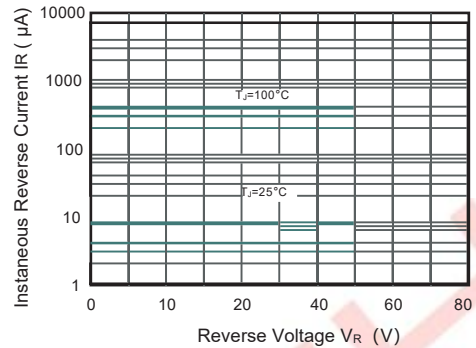


Fig.3 TYPICAL FORWARD VOLTAGE

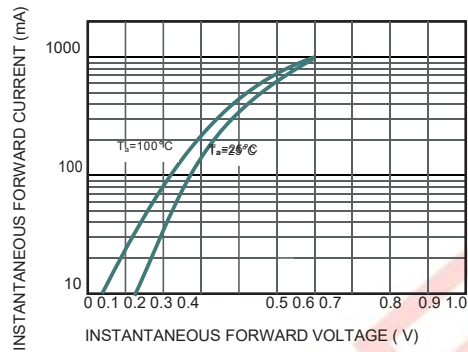


Fig.4 Typical Junction Capacitance

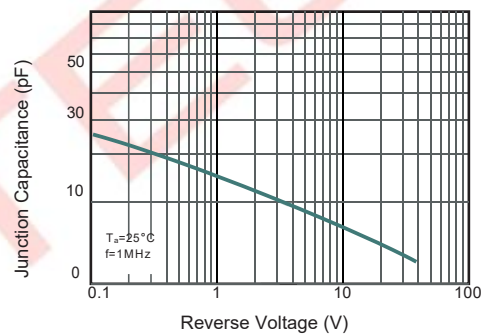
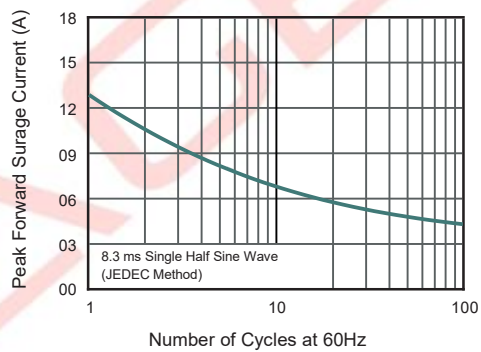


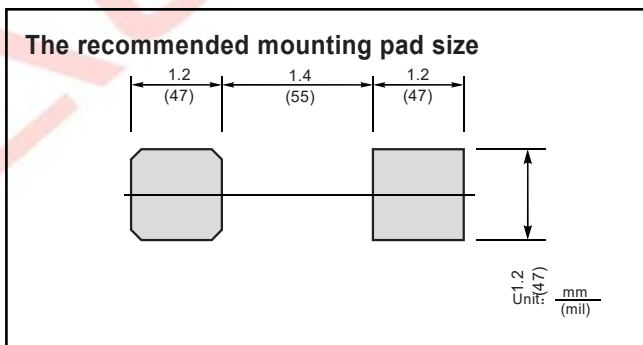
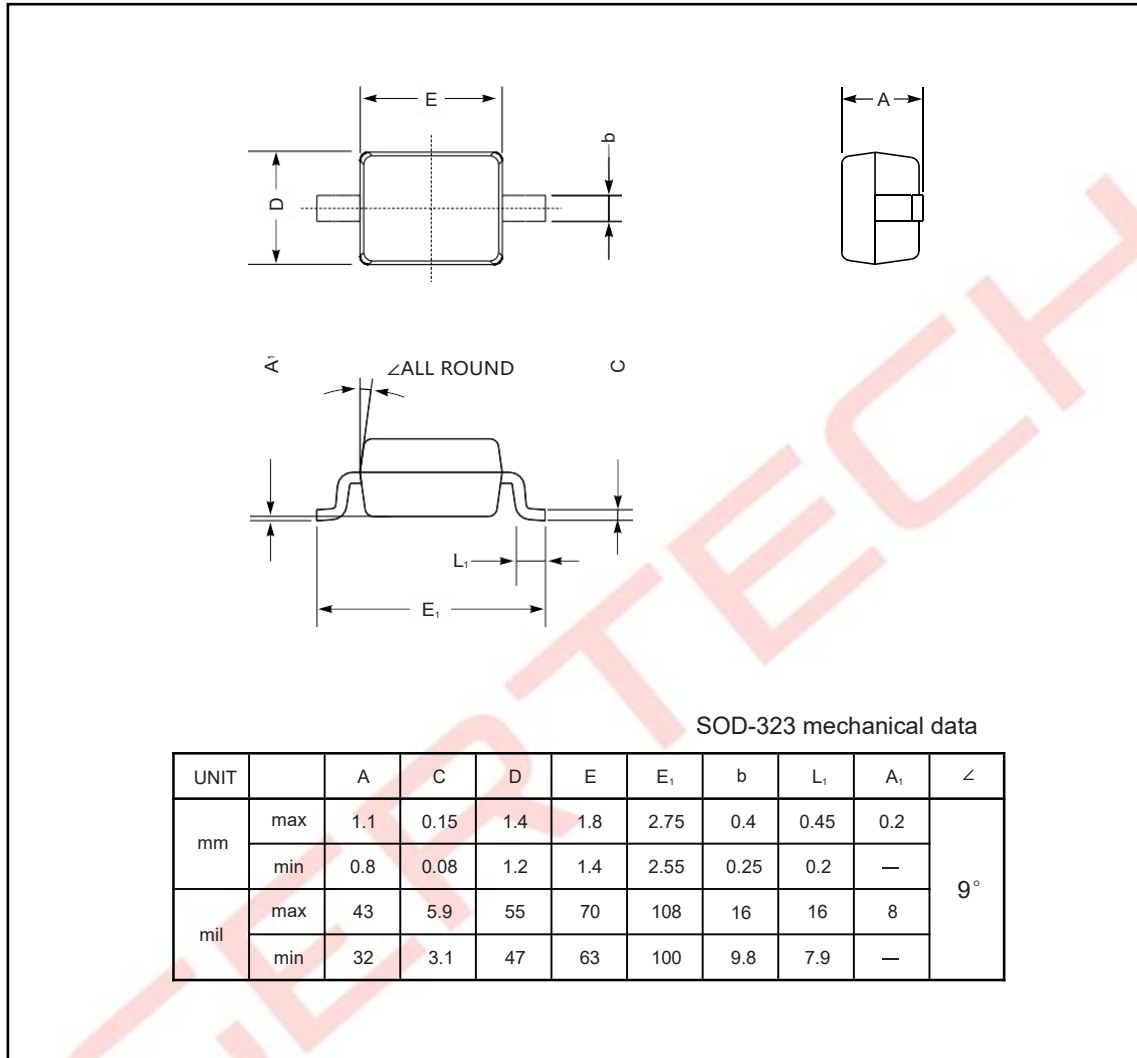
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



Marking

Type number	Marking code
RB501V-40AT	4