SCHOTTKY BARRIER DIODES

FEATURES

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

MECHANICAL DATA

▪Case: SOD-323FL
▪Terminals: Solderable per MIL-STD-750, Method 2026
▪Approx. Weight: 4.5mg / 0.00016oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Top View
Marking Code: 4
Simplified outline SOD-323FL and symbol

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	RB501VFL-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	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

Fig.1 Derating curve

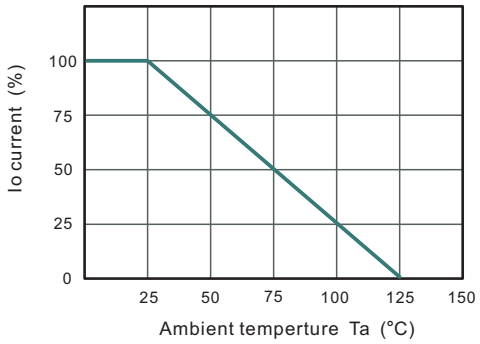


Fig.2 Typical Reverse Characteristics

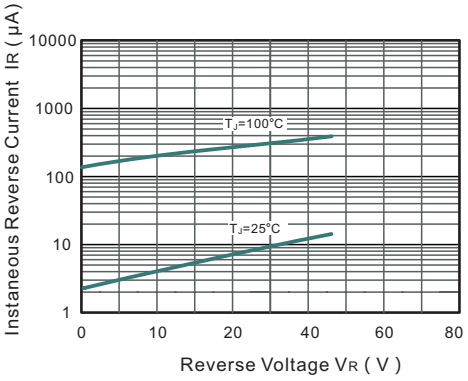


Fig.3 TYPICAL FORWARD VOLTAGE

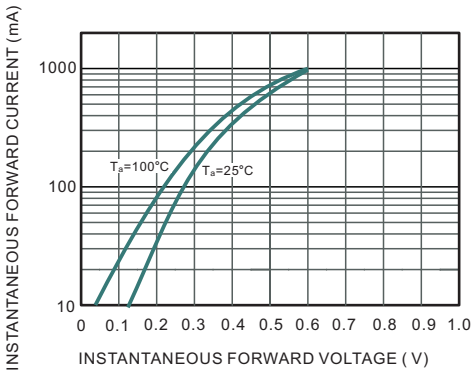


Fig.4 Typical Junction Capacitance

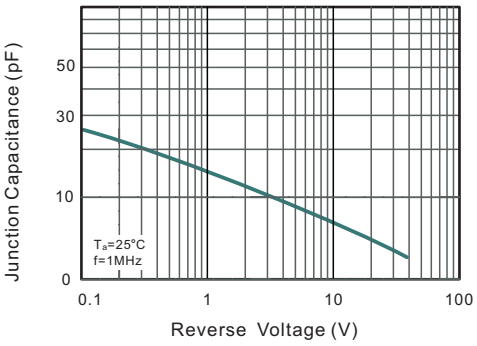
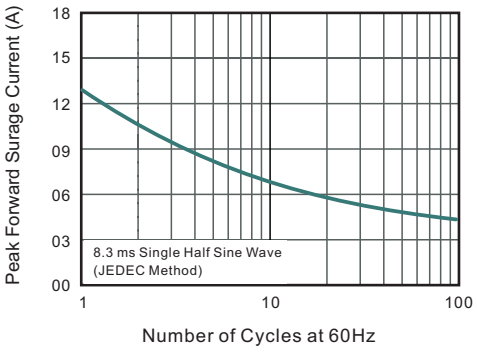
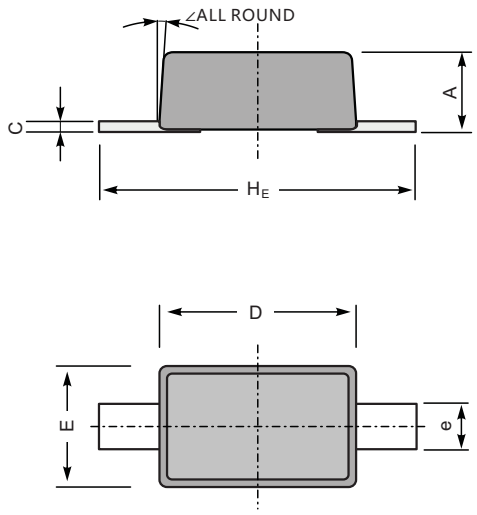


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



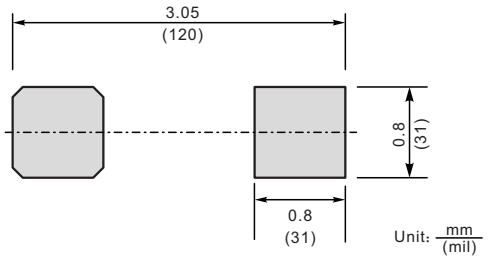
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads SOD-323FL



UNIT		A	C	D	E	e	H_E	∠
mm	max	1.0	0.25	1.8	1.35	0.4	2.7	8°
	min	0.8	0.05	1.6	1.15	0.25	2.3	
mil	max	39	9.8	71	53	18	106	
	min	31	2.0	63	45	10	91	

The recommended mounting pad size



Marking

Type number	Marking code
RB501VFL-40	4