SCHOTTKY BARRIER DIODES

FEATURES

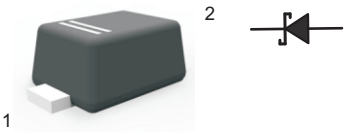
- Guard ring protection
- Low forward voltage drop
- For use in low voltage, high frequency inverters
- Surface mount device type

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: D4
Simplified outline SOD-323 and symbol

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	RB551VFL-40	Units
Maximum recurrent peak reverse voltage	V_{RM}	40	V
Continuous forward current	I_O	500	mA
Reverse Leakage Current	I_R	0.1 @V_R=40V	mA
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	A
Maximum Forward Voltage	V_F	0.47 @ I_F=0.5A	V
Total power dissipation	P_D	200	mW
Thermal Resistance, Junction to Ambient Air	$R_{\theta JA}$	400	°C/W
Junction Temperature	T_j	125	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

Fig.1 Power Derating Curve

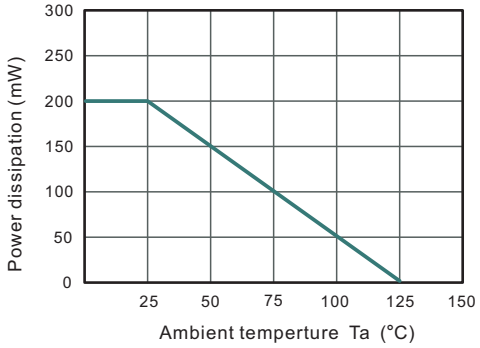


Fig.2 Typical Reverse Characteristics

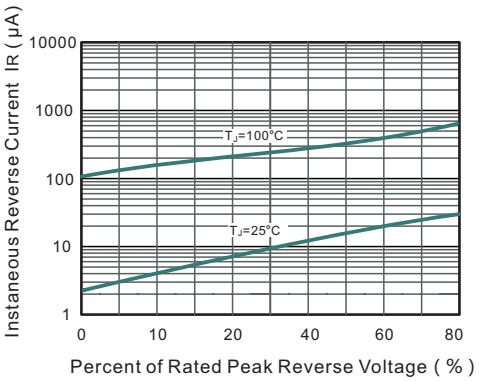


Fig.3 TYPICAL FORWARD VOLTAGE

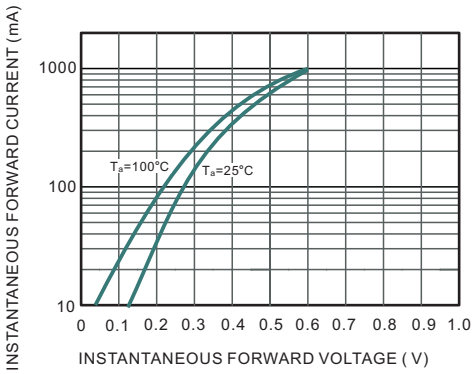


Fig.4 Typical Junction Capacitance

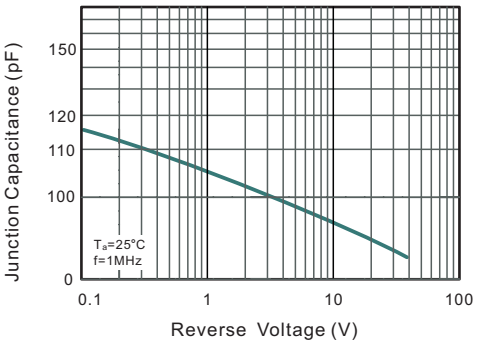
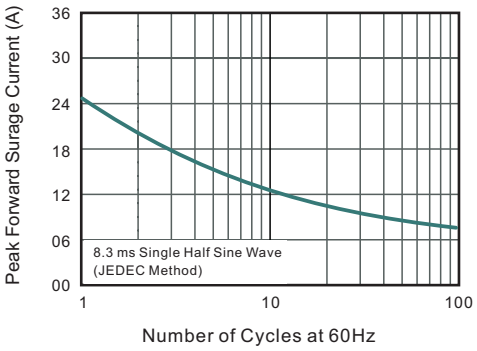
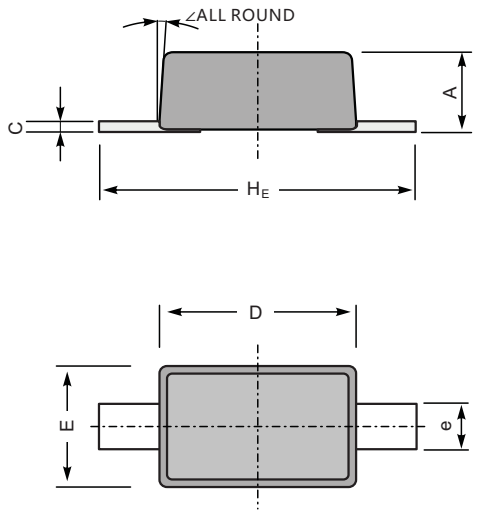


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



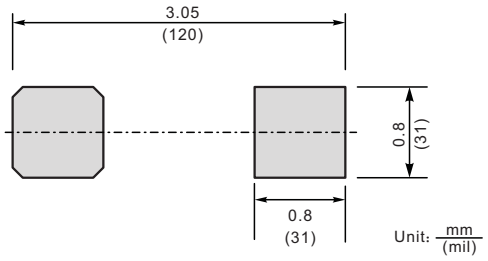
PACKAGE OUTLINE

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
RB551VFL-40	D4