Description

The RB551V-30 is schottky barrier diode, SOD-323 plastic package.

Applications

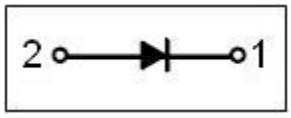
- Schottky diode

Features

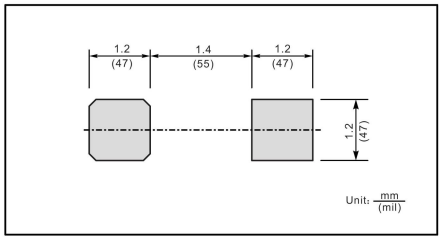
- Metal silicon junction,majority carrier conduction
- Guarding for overvoltage protection
- Low power loss, high efficiency
- High current capability
- Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters,free wheeling, and polarity protection applications
- Halogen-free productt

V_{RM}	I_O	I_{FSM}
30V	0.5A	25A

Equivalent Circuit & Pinning



The recommended mounting pad size



PIN1:Cathode PIN2:Anode

Marking

Model	RB551V-30
Marking	D

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	30	V
DC reverse voltage	V_R	30	V
Maximum Average Forward Current at Ta=25℃	I_O	0.5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	A
Power dissipation	P_d	200	mW
Junction Temperature	T_j	-55 ~ +150	℃
Storage Temperature	T_{stg}	-55 ~ +150	℃

Electrical Characteristics(Ta=25℃)

Parameter	Symbol	Test Conditions	Rating	Unit
Maximum Instantaneous Forward Voltage	V_F	I_F=100mA	0.36	V
		I_F=500mA	0.47	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	V_R=20	100	uA

Electrical Characteristic Curve

Fig.1 Forward Current Derating Curve

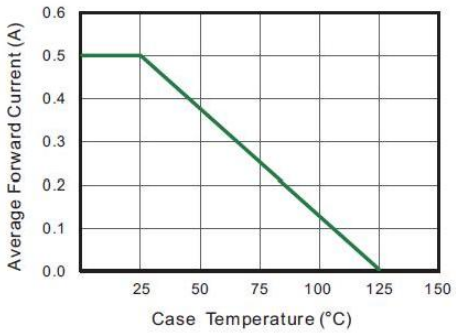


Fig.2 Typical Reverse Characteristics

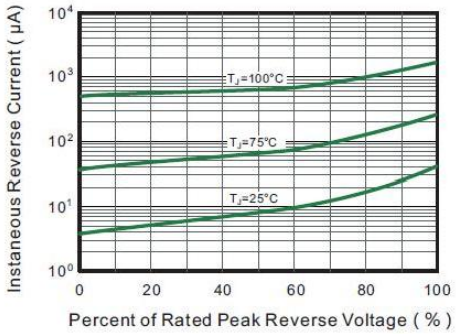


Fig.3 Typical Forward Characteristic

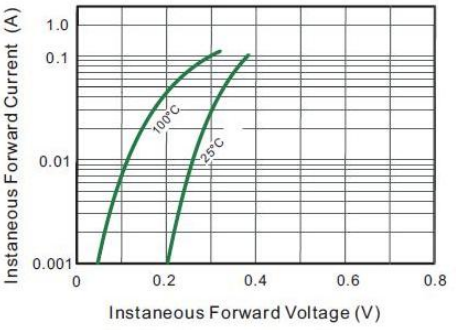


Fig.4 Typical Junction Capacitance

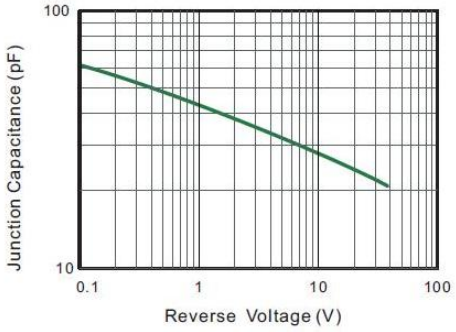
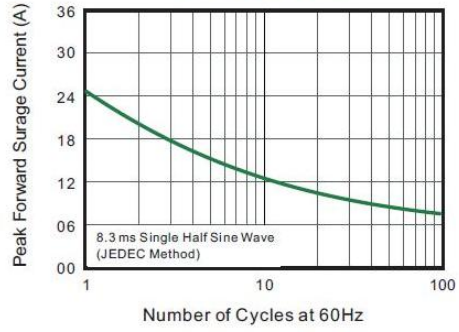
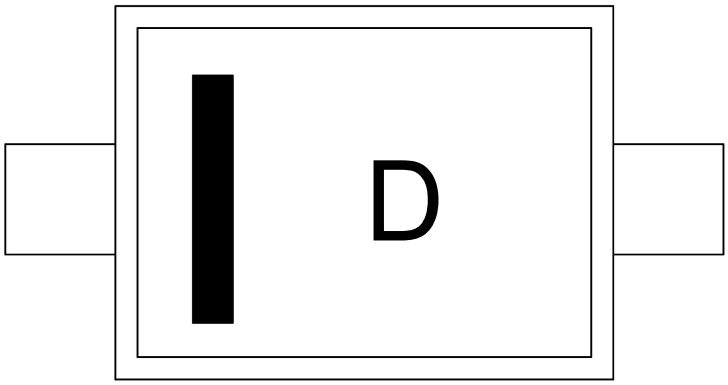


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



Marking instructions



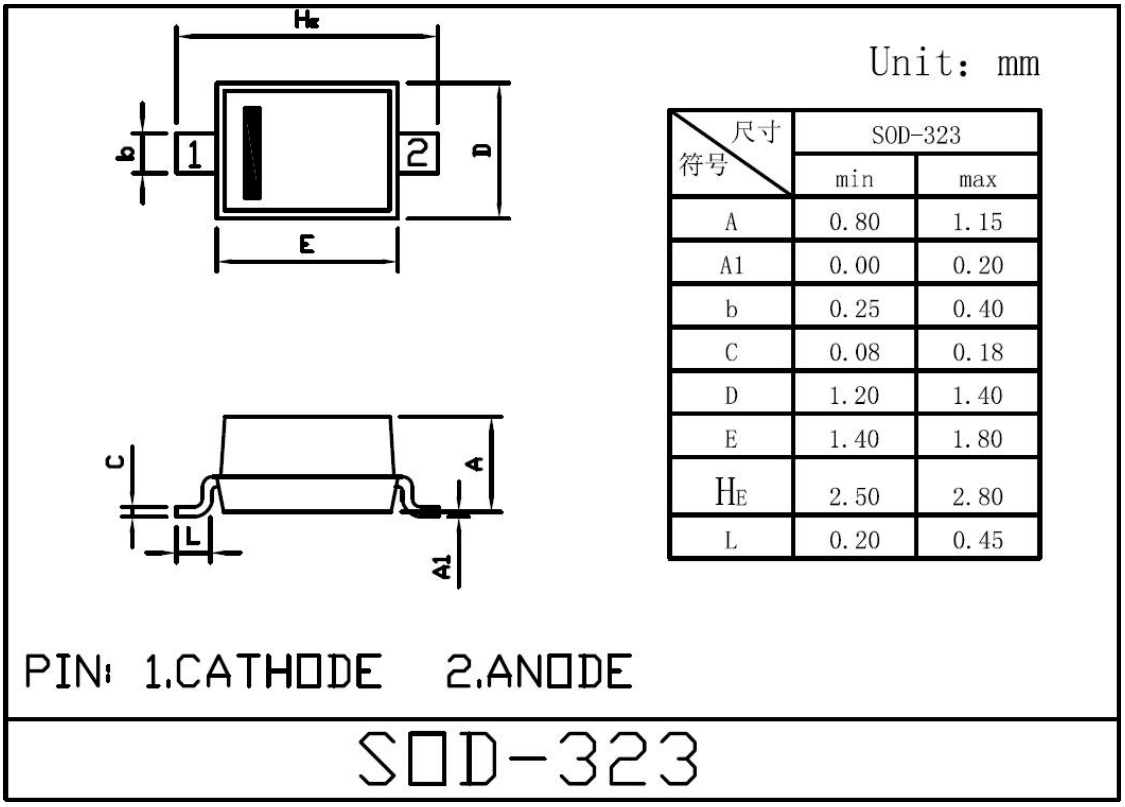
Note:

D Product Type

Packaging SPEC

Package Type	Units					Dimension (unit：mm³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7″ ×8	180×120×180	390×385×205

Package Dimensions



尺寸 / 符号	SOD-323	
	min	max
A	0.80	1.15
A1	0.00	0.20
b	0.25	0.40
C	0.08	0.18
D	1.20	1.40
E	1.40	1.80
H_E	2.50	2.80
L	0.20	0.45