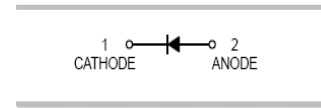




Features

- High current rectifier schottky diode
- Low voltage
- Low inductance
- For power supply



SOD-323



Application

- High frequency rectification

Mechanical Data

- Case: SOD-323
- Molding Compound: UL Flammability Classification Rating 94V-0
- Terminals: Matte tin-plated leads; solderability-per MIL-STD-202, Method 208

Ordering Information

Part Number	Package	Shipping Quantity	Marking Code
RB551VH-30	SOD-323	3000 pcs / Tape & Reel	D.

Maximum Ratings (@ T_A = 25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	30	V
DC Reverse Voltage	V _R	20	V
Maximum Average Forward Output Current	I _{F(AV)}	0.5	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	2	A

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal Resistance Junction-to-Air ^{*1}	R _{θJA}	358	°C/W
Thermal Resistance Junction-to-Case ^{*1}	R _{θJC}	199	°C/W
Thermal Resistance Junction-to-Lead ^{*1}	R _{θJL}	250	°C/W
Operating junction Temperature	T _J	-55 ~ +125	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C



RB551VH-30

Small Signal Schottky Barrier Diode



Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage ^{*2}	V_F	$I_F = 100\text{mA}$	-	-	0.35	V
		$I_F = 500\text{mA}$	-	-	0.45	V
Maximum Peak Reverse Current	I_R	$V_R = 20\text{V}$	-	-	30	μA
Typical Junction Capacitance	C_J	$V_R = 0\text{V}, f = 1\text{MHz}$	-	150	225	pF

Notes:

1. The data tested by surface mounted on a 15mm * 15mm * 1mm FR4-epoxy P.C.B
2. Pulse width $\leq 380\mu\text{s}$, Duty cycle < 2%



Ratings and Characteristic Curves (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

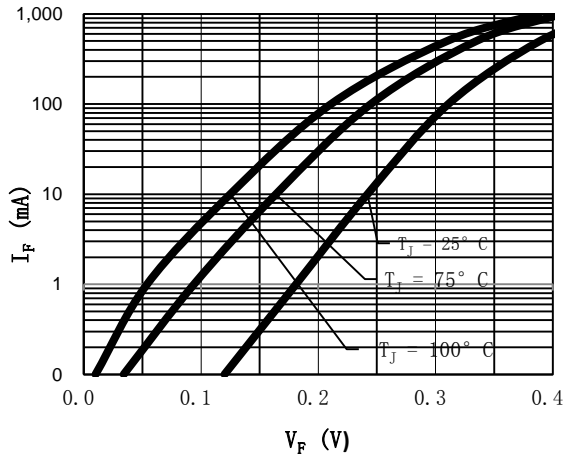


Fig 1 Forward Characteristics

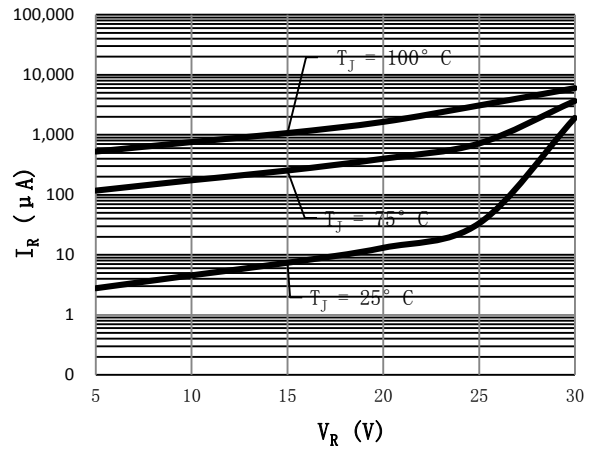


Fig 2 Typical Reverse Characteristic

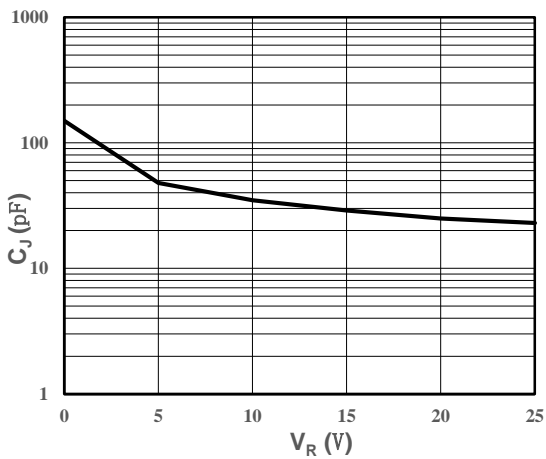
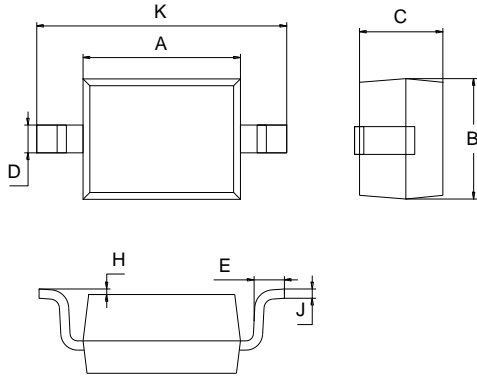


Fig 3 Typical Capacitance vs Reverse Voltage



Package Outline Dimensions (Unit: mm)



SOD-323		
Dimension	Min.	Max.
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.10
J	0.05	0.15
K	2.55	2.75

Mounting Pad Layout (Unit: mm)

SOD-323

