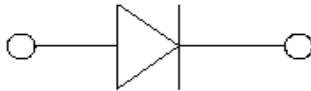


## Schottky Barrier Diode



### Features

- For Power Supply
- Moisture Sensitivity Level 1
- Low Voltage, Low Inductance

### Mechanical Data

- **Package:** SOD323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** D

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Peak Repetitive Reverse Voltage	$V_{RRM}$	V		30
DC Blocking Voltage	$V_R$	V	$I_R = 100\mu A$	20
Non-repetitive Peak forward surge current	$I_{FSM}$	A	$t_p = 8.3ms$ , half sine	2
Repetitive Peak Forward Current	$I_{FRM}$	A	$t_p = 1ms$ , $\delta = 0.25$	1
Average forward current	$I_{FAV}$	A		0.5
Power Dissipation	$P_D$	mW		200
Thermal Resisitance Junction to Ambient Air	$R_{thja}$	°C/W		500
Maximum junction temperature	$T_j$	°C		125
Storage temperature range	$T_{stg}$	°C		-55 to +150

\*Part mounted on FR-4 board with recommended pad layout.

### ■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB551V-30	F2	Approximate 0.0048	3000	30000	120000	7" reel



# RB551V-30

## ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	Symbol	UNIT	Conditions	Min.	Typ.	Max.
Forward Voltage *	V <sub>F</sub>	V	I <sub>F</sub> =0.1A	-	-	0.37
			I <sub>F</sub> =0.5A	-	-	0.47
Reverse Leakage Current	I <sub>R</sub>	μA	V <sub>R</sub> =20V	-	-	100

## ■ Typical Characteristics

Fig 1: Typical Forward Characteristics

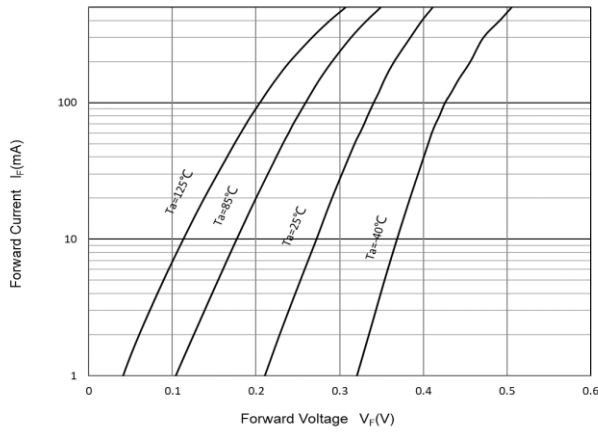


Fig 2: Typical Reverse Characteristics

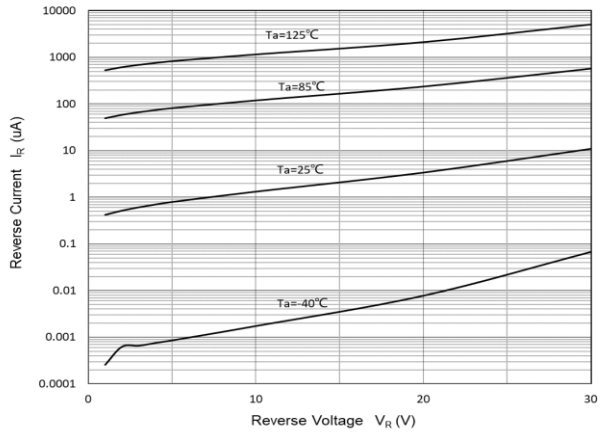


Fig 3: P<sub>D</sub>-T<sub>a</sub> Curve

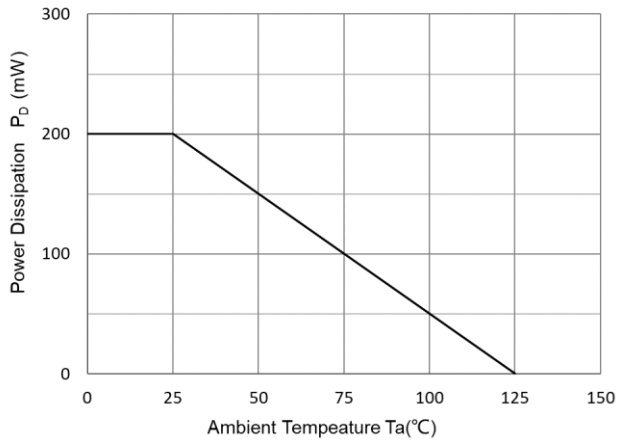
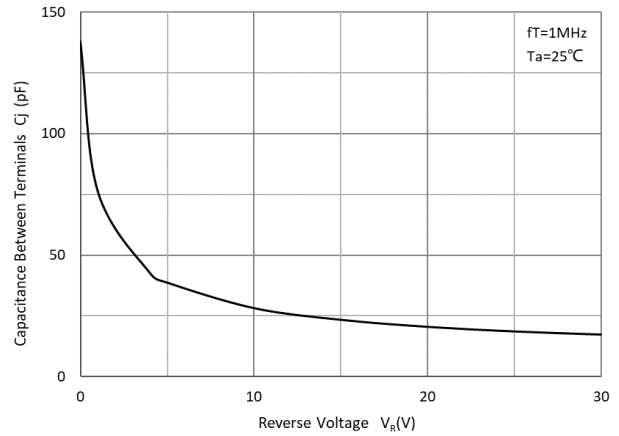
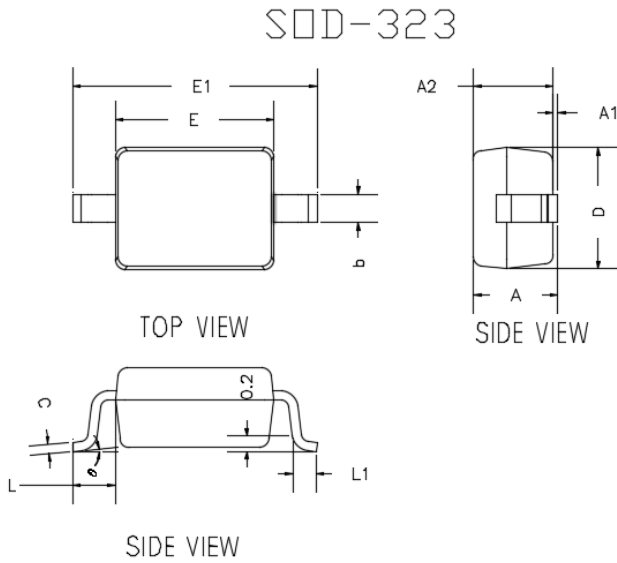


Fig 4: Capacitance Capability





## ■ Outline Dimensions

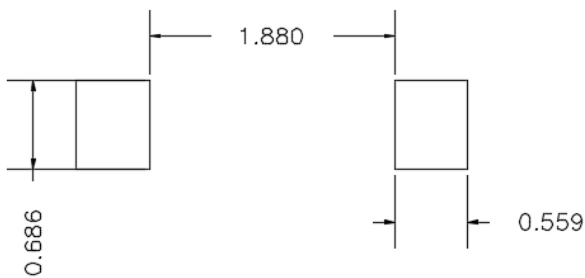


DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	---	0.0393	---	1.0000
A1	0.0000	0.0039	0.0000	0.1000
A2	0.0314	0.0354	0.8000	0.9000
b	0.0098	0.0157	0.2500	0.4000
c	0.0031	0.0059	0.0800	0.1500
D	0.0472	0.0551	1.2000	1.4000
E	0.0629	0.0709	1.6000	1.8000
E1	0.0984	0.1063	2.5000	2.7000
L	0.0187TYP		0.475TYP	
L1	0.0098	0.0157	0.250	0.400
e	0°	8°	0°	8°

**NOTES:**

- All dimensions are in millimeters (mm) unless otherwise specified.  
[所有尺寸均以毫米为单位, 除非另有说明]
- General tolerances: ±0.10mm unless otherwise specified.  
[通用公差为±0.10mm, 除非另有说明]
- Dimensions and tolerances per ASME Y14.5M-2018.  
[尺寸和公差遵循 ASME Y14.5M-2018 标准]
- All dimensions shown are exclusive of burrs and gate residues.  
Burrs and gate vestiges shall not exceed 0.15 mm in maximum.  
[所有尺寸均不包括毛刺和浇口残留。毛刺与浇口残留的尺寸最大不得超过 0.15mm]
- Dimension b does not include dambar protrusion of max 0.100 mm per side.  
[尺寸b不包括单边最大0.100 MM的中筋凸出部分]
- Dimensions D and E are the overall extreme outer dimensions of the mold compound. These dimensions exclude mold flash, lead flash, protrusions and burrs but include the maximum allowable mold mismatch.  
[D和E是塑封体的外部极限尺寸, 不包括包封溢料、内引线溢料、凸出部分以及胶体毛刺, 但是包含了包封错位的最大尺寸]
- Formed leads shall be planar with respect to one another within a maximum of 0.076 mm relative to the seating plane.  
[成型的管脚应为同一平面, 共面性最大为0.1mm]

## ■ Soldering Footprint



UNIT : mm

SUGGESTED SOLDER PAD LAYOUT



## RB551V-30

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