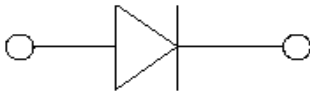


## Schottky Barrier Diode



### Features

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

### Mechanical Data

- **Package:** SOD-323
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** D4

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

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
DC Blocking Voltage	$V_R$	V		40
Non-repetitive Peak forward surge current	$I_{FSM}$	A		2
Average forward current	$I_{FAV}$	A		0.5
Power Dissipation	$P_D$	mW		200
Thermal Resisance Junction to Ambient Air	$R_{\theta JA}$	°C/W		500
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)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
RB551V-40	F2	Approximate 0.004	3000	30000	120000	7" reel



# RB551V-40

## ■ 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> =0.5A	-	-	0.47
Reverse Voltage	V <sub>R</sub>	V	I <sub>R</sub> =0.1mA	40		
Reverse Leakage Current	I <sub>R</sub>	μA	V <sub>R</sub> =40V	-	-	100

## ■ Typical Characteristics

Fig. 1 - Forward Characteristics

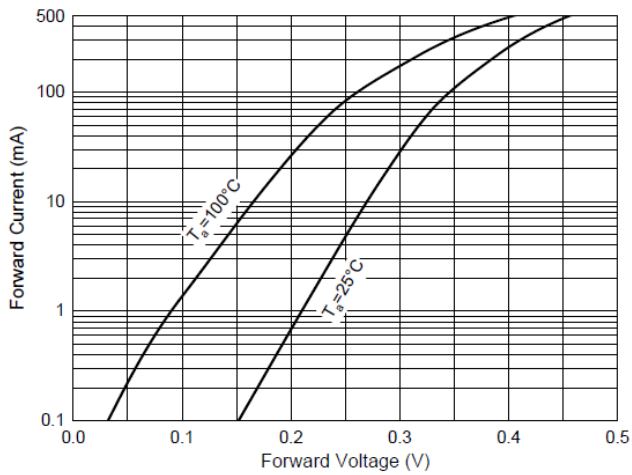


Fig. 2 - Reverse Characteristics

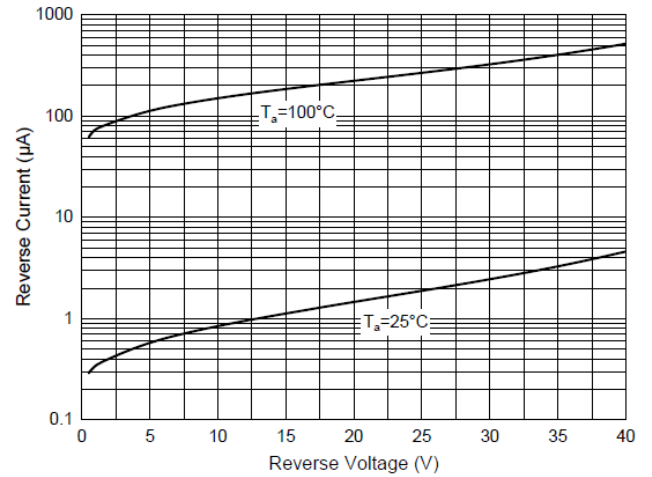


Fig. 3 - Capacitance Characteristics

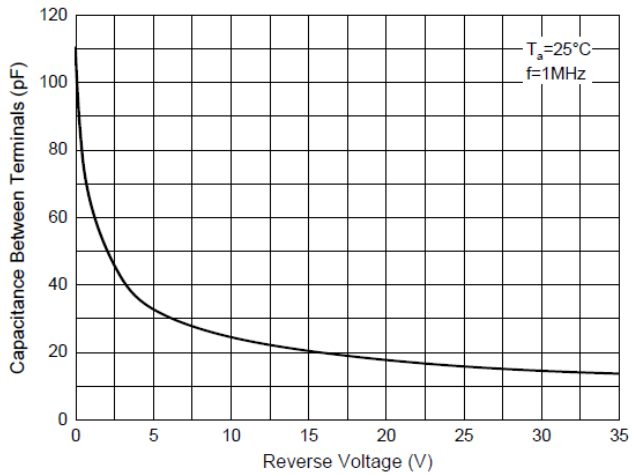
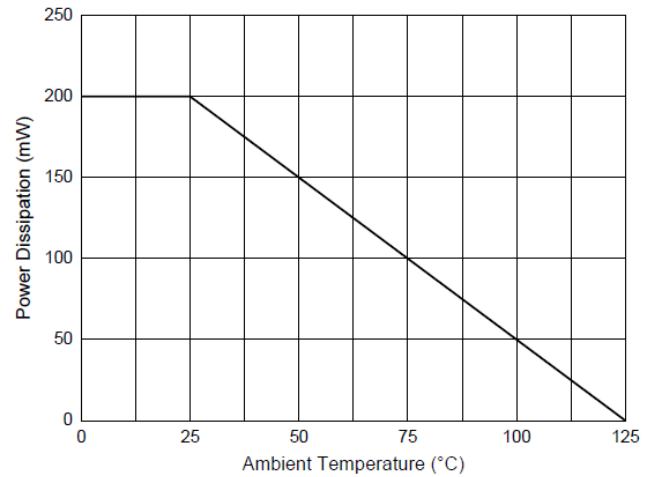


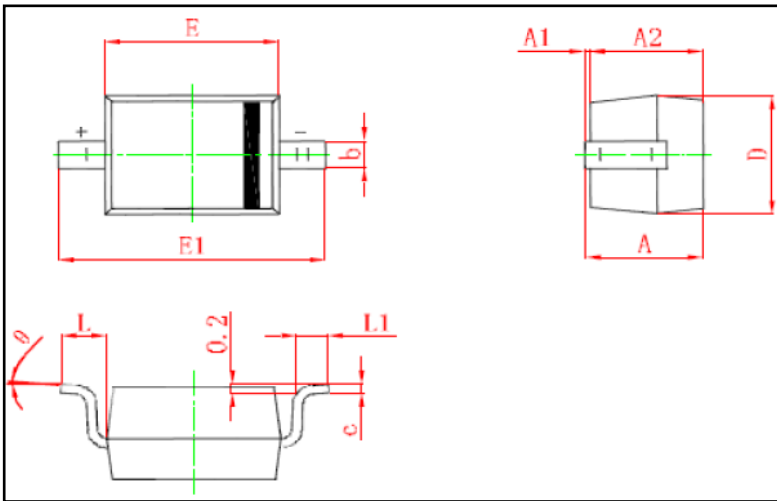
Fig. 4 - Power Derating Curve





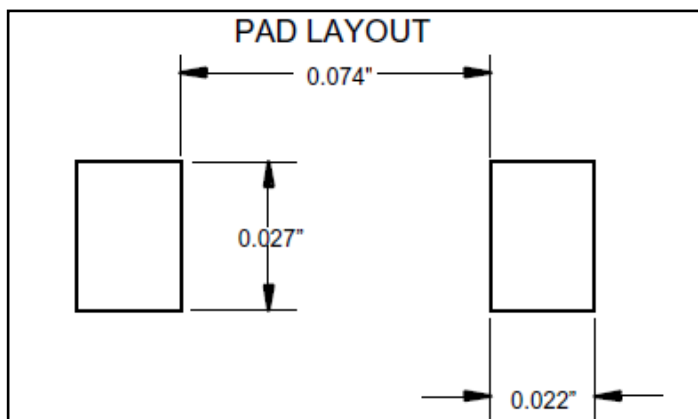
# RB551V-40

## ■ SOD-323 Package Outline Dimensions



Symbol	Min. (mm)	Max. (mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.400
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
$\theta$	0°	8°

## ■ SOD-323 Soldering Footprint



Unit: inches



## RB551V-40

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