



DESCRIPTION

Silicon epitaxial planar

The RB551V-30 is available in SOD-323 package

ORDERING INFORMATION

Package Type	Part Number
SOD-323	RB551V-30
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

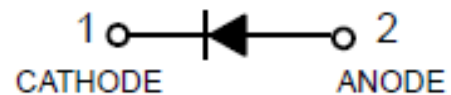
FEATURES

- Small surface mounting type.
- Ultra low V_F ($V_F=0.45V$ Typ. at 0.5A)
- High reliability.
- Available in SOD-323 package

APPLICATIONS

- High-Frequency Rectification
- Switching Regulators

PIN DESCRIPTION






ABSOLUTE MAXIMUM RATINGS

$T_A = 25^\circ\text{C}$

V_{RM} , Peak Reverse Voltage	30V
V_R , DC Reverse Voltage	20V
I_o , Mean Rectifying Current	0.5A
I_{FSM} , Peak Forward Surge Current ^{NOTE1}	2A
T_J , Junction Temperature	125°C
T_{STG} , Storage Temperature	-40°C~+125°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

NOTE1:60Hz for 1 

ELECTRICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Min.	Typ.	Max	Unit
Forward Voltage	V_{F1}	$I_F=100\text{mA}$	-	-	0.36	V
	V_{F2}	$I_F=500\text{mA}$	-	-	0.54	V
Reverse Current	I_R	$V_R=20\text{V}$	-	-	100	μA



TYPICAL CHARACTERISTICS

$T_A = 25^\circ\text{C}$

Figure 1. Forward Characteristics

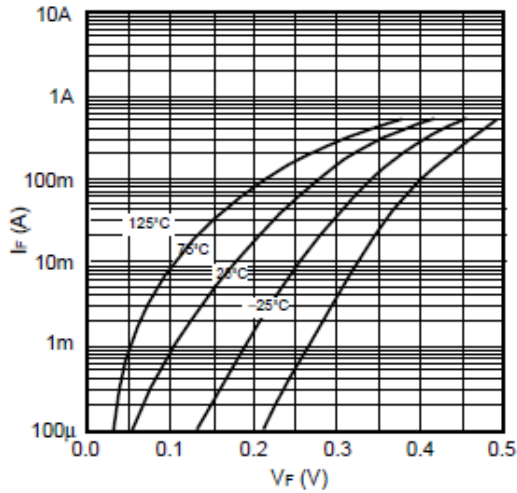


Figure 2. Reverse Characteristics

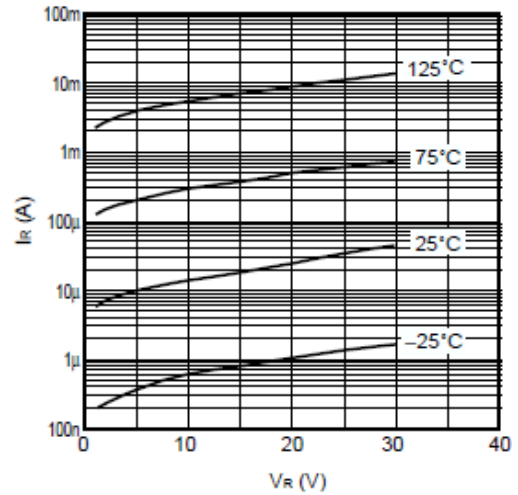


Figure 3. Capacitance Between Terminals Characteristics

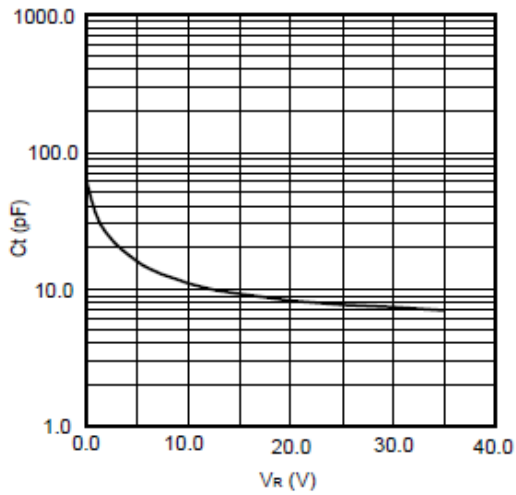
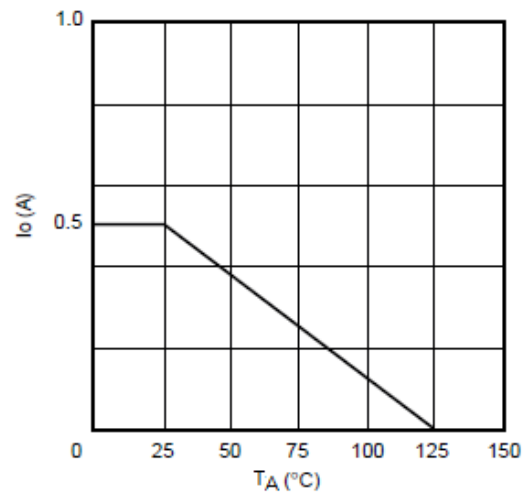


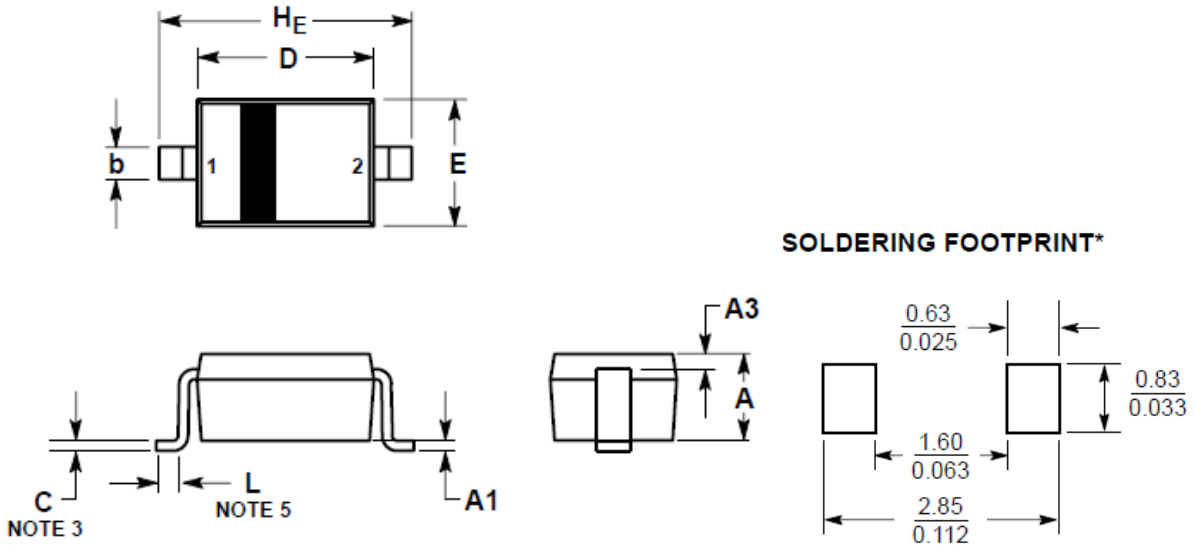
Figure 4. Derating Curve





PACKAGE INFORMATION

Dimension in SOD-323 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.080	1.000	0.031	0.040
A1	0.000	0.100	0.000	0.004
A3	0.150 REF		0.006 REF	
b	0.250	0.400	0.010	0.016
C	0.089	0.177	0.003	0.007
D	1.600	1.800	0.062	0.070
E	1.150	1.350	0.045	0.053
L	0.080	-	0.003	-
HE	2.300	2.700	0.090	0.105



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