DESCRIPTION

Silicon epitaxial planar

The RB551V-30 is available in SOD-323 Package

ORDERING INFORMATION

Package Type	Part Number				
SOD-323	RB551V-30				
Note	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



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ABSOLUTE MAXIMUM RATINGS

$T_A = 25^{\circ}C$

1A - 25 0	
V _{RM} , Peak Reverse Voltage	30V
V _R , DC Reverse Voltage	20V
Io, 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 $\stackrel{\frown}{-}$

ELECTRICAL CHARACTERISTICS

$T_A = 25^{\circ}C$

Parameter	Symbol	Conditions	Min.	Тур.	Max	Unit
Forward Voltage	V _{F1}	I _F =100mA	ı	i	0.36	V
	V _{F2}	I _F =500mA	-	-	0.54	V
Reverse Current	I _R	V _R =20V	-	-	100	μΑ

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TYPICAL CHARACTERISTICS

 $T_A = 25^{\circ}C$

Figure 1. Forward Characteristics

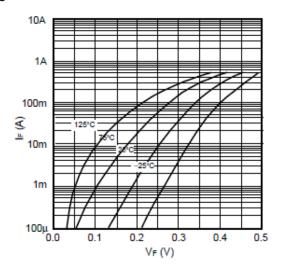


Figure 3. Capacitance Between Terminals
Characteristics

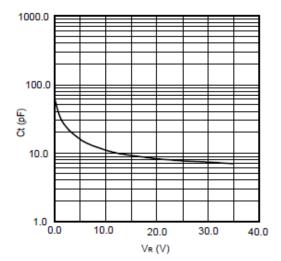


Figure 2. Reverse Characteristics

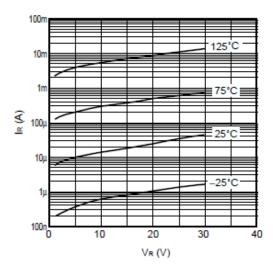
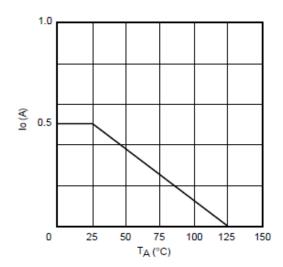


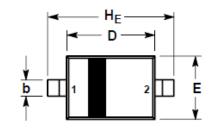
Figure 4. Derating Curve



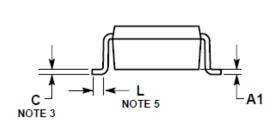
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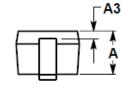
PACKAGE INFORMATION

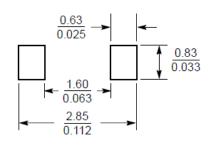
Dimension in SOD-323 Package (Unit: mm)



SOLDERING FOOTPRINT*







DIM	MILLIM	ETERS	INCHES		
	MIN	MAX	MIN	MAX	
Α	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	
С	0.089	0.177	0.003	0.007	
D	1.600	1.800	0.062	0.070	
Е	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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IMPORTANT NOTICE

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