



DESCRIPTION

The RB491D is available in SOT-23 package

ORDERING INFORMATION

Package Type	Part Number
SOT-23	RB491D
Note	3,000pcs/Reel
AiT provides all RoHS Compliant Products	

CONSTRUCTION

Silicon epitaxial planar

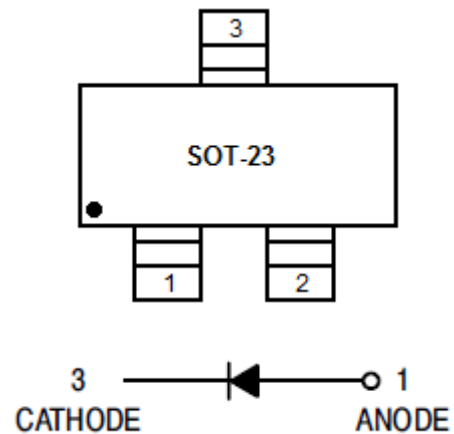
FEATURES

- Small mold type. (SOT-23)
- Ultra low V_F . ($V_F=0.40V$ Typ. at 1A)
- $I_F=1.0A$ guaranteed despite the size.
- RoHS Compliant
- Available in SOT-23 package

APPLICATIONS

- Low-power rectification
- For switching power supply

PIN DESCRIPTION





ABSOLUTE MAXIMUM RATINGS

@T_A=25°C

V _{RM} , Peak Reverse Voltage	25V
V _R , DC Reverse Voltage	20V
I _F , DC Forward Current	1.0A
I _{FSM} ^{NOTE1} , Peak Forward Surge Current	3A
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=25C

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	V _F	I _F =1.0A			0.45	V
Reverse current	I _R	V _R =20V			200	μA

NOTE: ESD sensitive product handling required.



TYPICAL CHARACTERISTICS

Figure 1. Forward characteristics

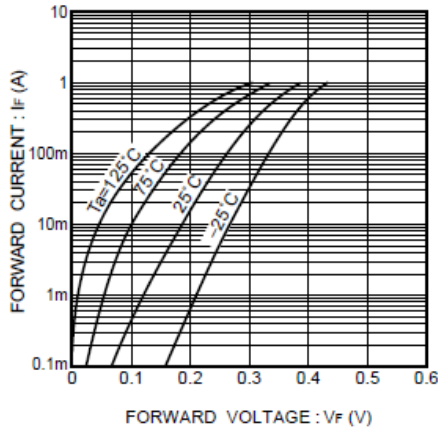


Figure 2. Reverse characteristics

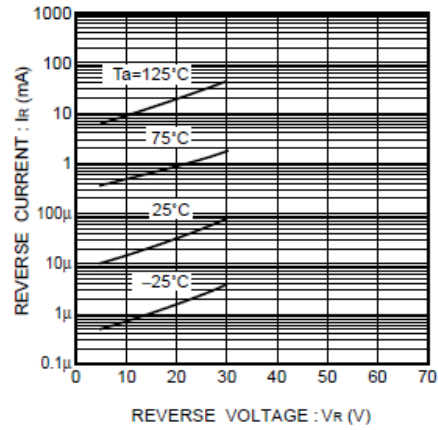


Figure 3. Capacitance between terminals characteristics

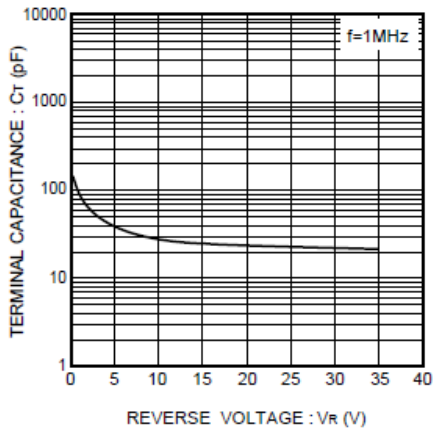


Figure 4. Forward power dissipation characteristics

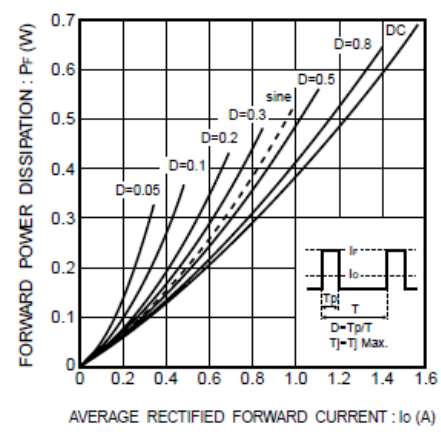
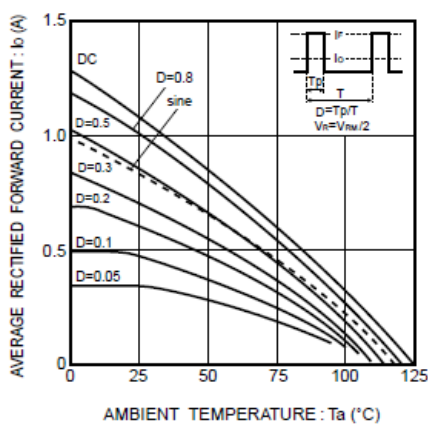


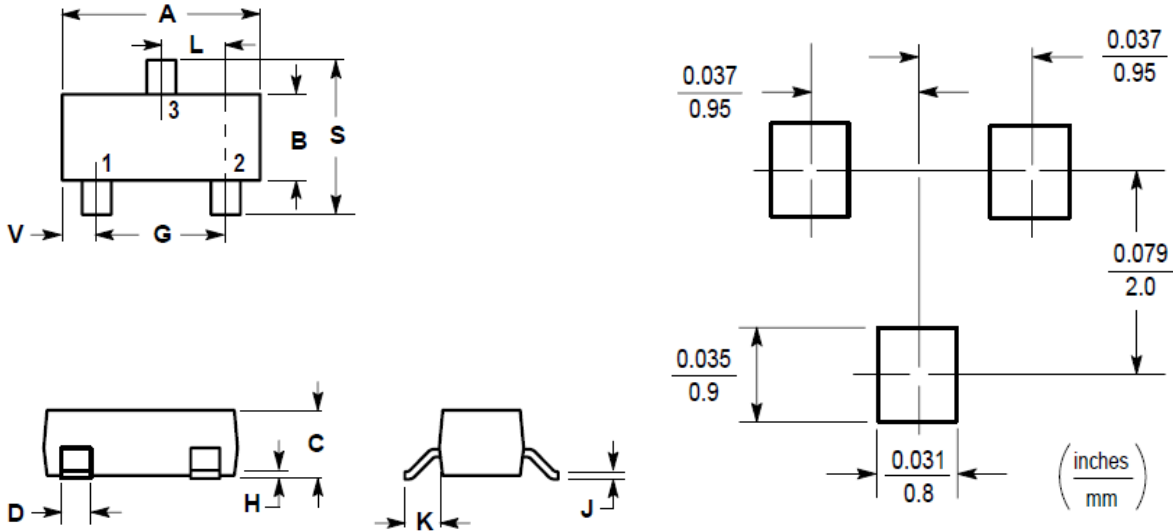
Figure 5. Derating curve ($I_o - T_A$)





PACKAGE INFORMATION

Dimension in SOT-23 Package (Unit: mm)



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	2.80	3.04	0.1102	0.1197
B	1.20	1.40	0.0472	0.0551
C	0.89	1.11	0.0350	0.0440
D	0.37	0.50	0.0150	0.0200
G	1.78	2.04	0.0701	0.0807
H	0.013	0.100	0.0005	0.0040
J	0.085	0.177	0.0034	0.0070
K	0.35	0.69	0.0140	0.0285
L	0.89	1.02	0.0350	0.0401
S	2.10	2.64	0.0830	0.1039
V	0.45	0.60	0.0177	0.0236



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