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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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SJPB-D4

May. 2016

Schottky Barrier Rectifier

General Description

SJPB-D4 is a Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

Applications

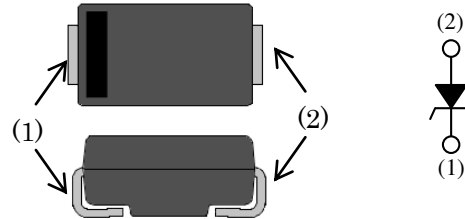
- DC-DC converters
- AC adapter
- High frequency rectification circuit

Features

- Super-high speed & low noise switching.
- Low forward voltage drop.

Package

SJP



(1) Cathode

(2) Anode

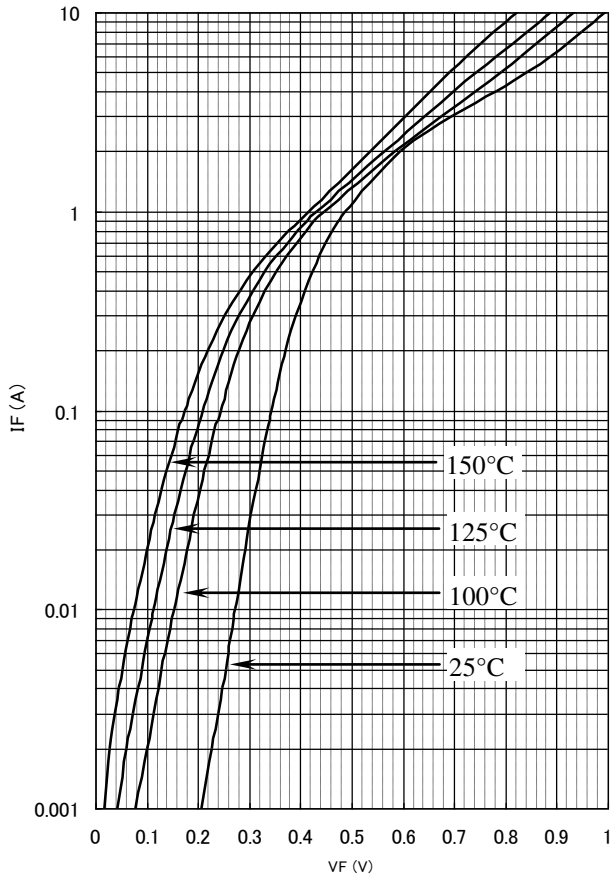
Not to Scale

Key Specifications

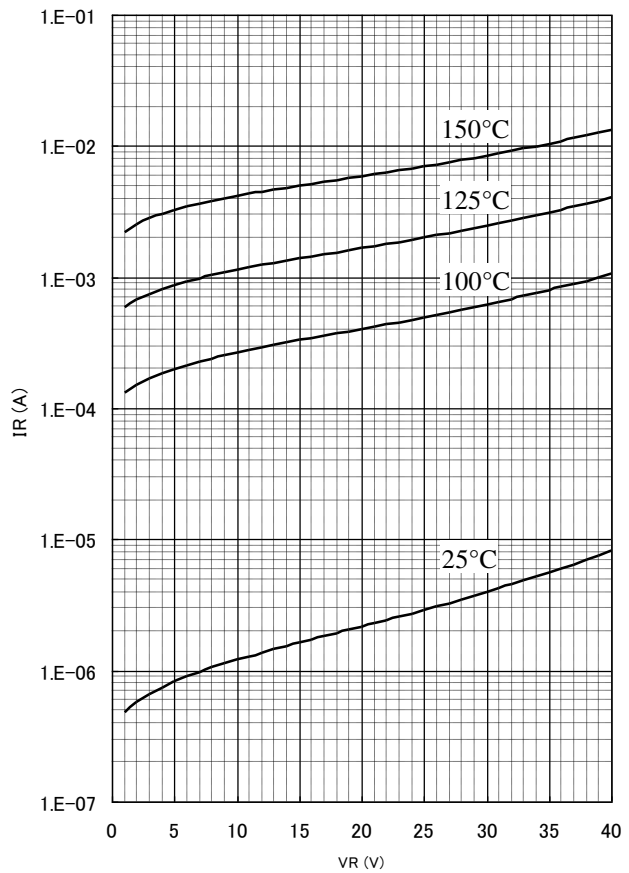
Item	Rating	Unit	Conditions
V_{RM}	40	V	
V_F	0.55	V	$I_F=1.0A$
$I_{F(AV)}$	1.0	A	

Typical Characteristics

SJPB-D4 I_F - V_F Characteristics



SJPB-D4 V_R - I_R Characteristics



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Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	40	
2	Peak Reverse Voltage	V_{RM}	V	40	
3	Average Forward Current	$I_{F(AV)}$	A	1.0	
4	Peak Surge Forward Current	I_{FSM}	A	30	Half sine-wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	4.5	$1ms \leq t \leq 10ms$
6	Junction Temperature	T_j	$^{\circ}C$	-40 to 150	
7	Storage Temperature	T_{stg}	$^{\circ}C$	-40 to 150	

Electrical characteristics ($T_a=25^{\circ}C$, unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.55 max.	$I_F=1.0A$
2	Reverse Leakage Current	I_R	μA	100 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	35 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Thermal Resistance	$R_{th(j-l)}$	$^{\circ}C/W$	20 max.	Between Junction and Lead

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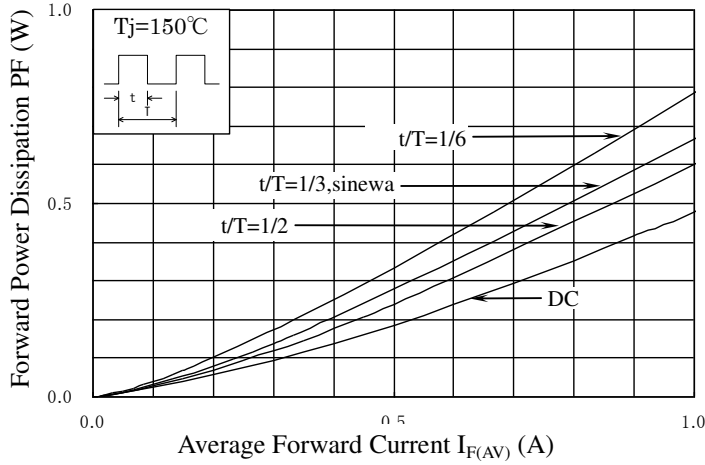
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Schottky Barrier Rectifier

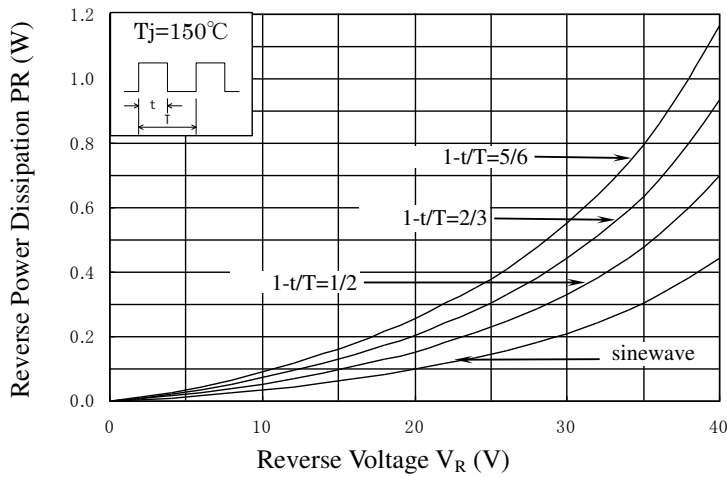
May, 2016

Characteristics

Forward Power Dissipation

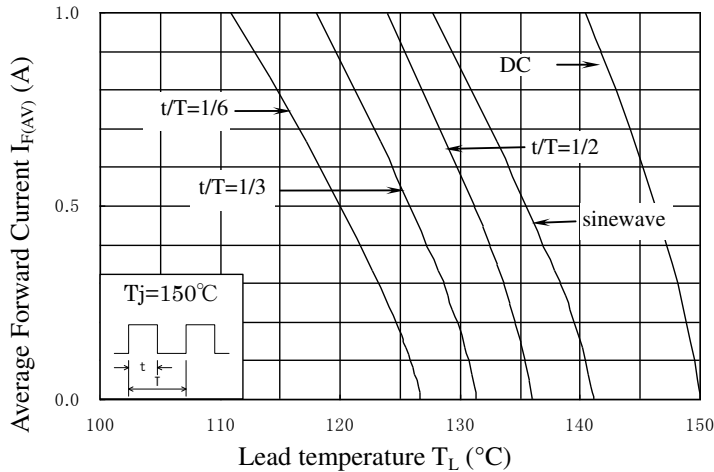


Reverse Power Dissipation



Current Derating

$V_R=40\text{V}$



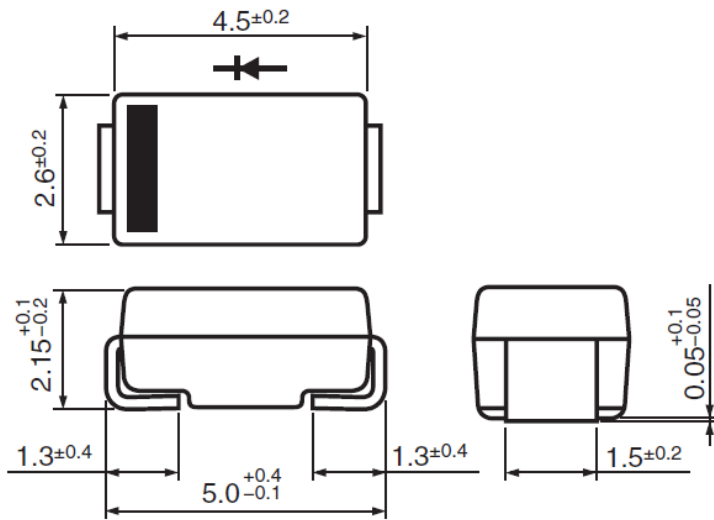
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Schottky Barrier Rectifier

Outline drawings

- SJP



NOTES:

- Dimension is in millimeters.
- Lead treatment Pb-free. Device composition compliant with the RoHS directive.

Connection Diagram



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