SANKEN ELECTRIC

SJPB-H4

Schottky Barrier Rectifier

May. 2016

General Description

SJPB-H4 is a Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

Applications

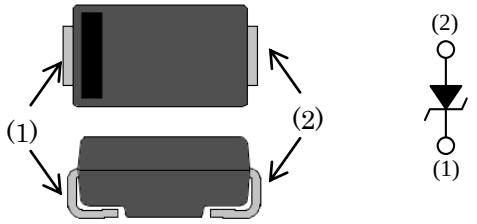
・DC-DC converters
・AC adapter
・High frequency rectification circuit

Features

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

Package

SJP



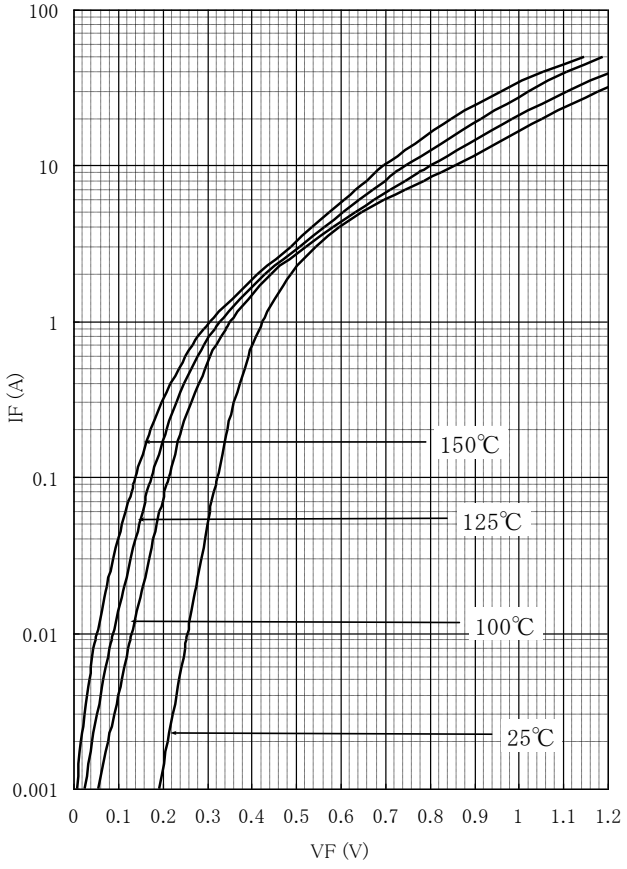
(1) Cathode
(2) Anode
Not to Scale

Key Specifications

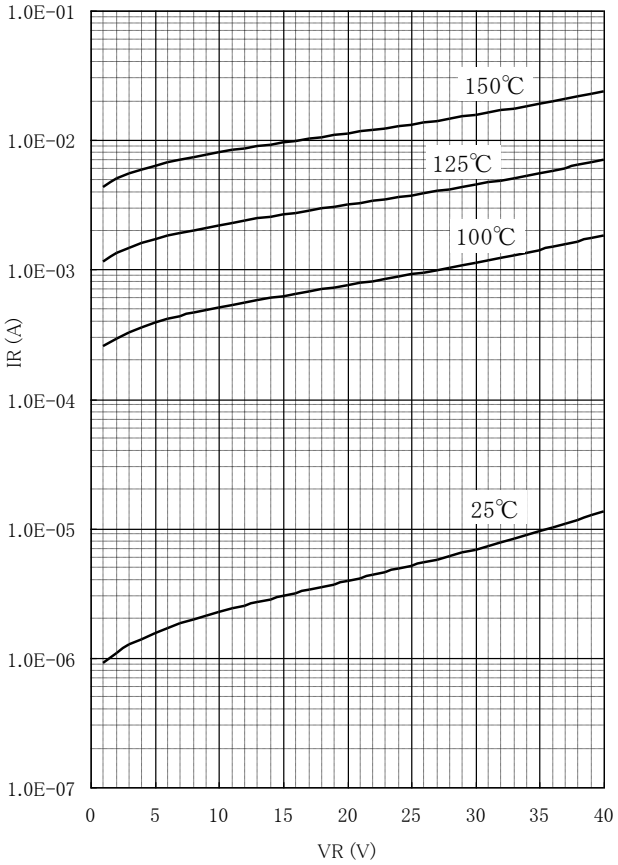
Item	Rating	Unit	Conditions
V_{RM}	40	V	
V_F	0.55	V	I_F=2.0A
$I_{F(AV)}$	2.0	A	

Typical Characteristics

SJPB-H4 IF-VF Characteristics



SJPB-H4 VR-IR Characterisitics



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Absolute maximum ratings

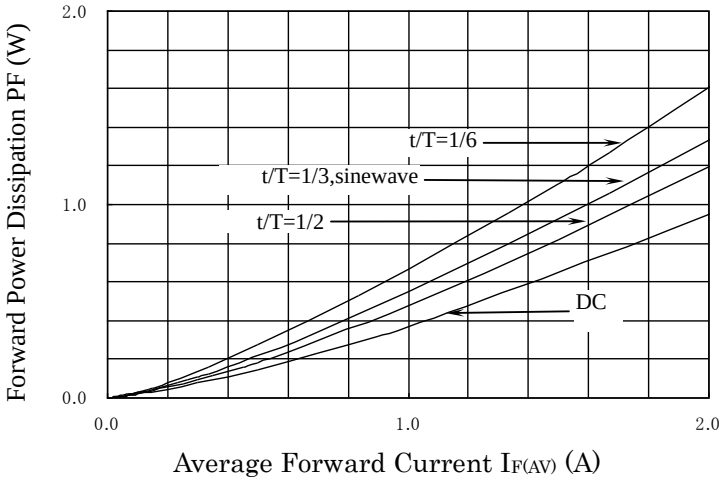
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	40	
2	Peak Reverse Voltage	V_{RM}	V	40	
3	Average Forward Current	$I_{F(AV)}$	A	2.0	
4	Peak Surge Forward Current	I_{FSM}	A	50	Half sine-wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	12.5	$1ms \leq t \leq 10ms$
6	Junction Temperature	T_j	°C	-40 to 150	
7	Storage Temperature	T_{stg}	°C	-40 to 150	

Electrical characteristics (Ta=25°C, unless otherwise specified)

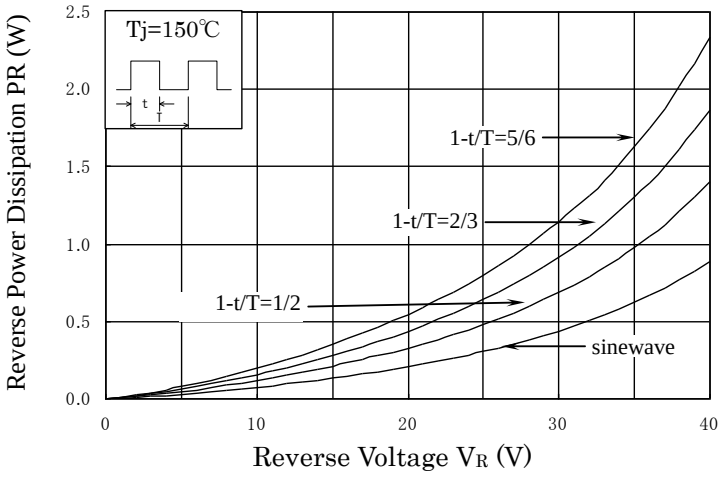
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	0.55 max.	I_F=2.0A
2	Reverse Leakage Current	I_R	μA	200 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	70 max.	$V_R=V_{RM}$, T_j=150°C
4	Thermal Resistance	$R_{th(j-c)}$	°C/W	20 max.	Between Junction and Lead

Characteristics

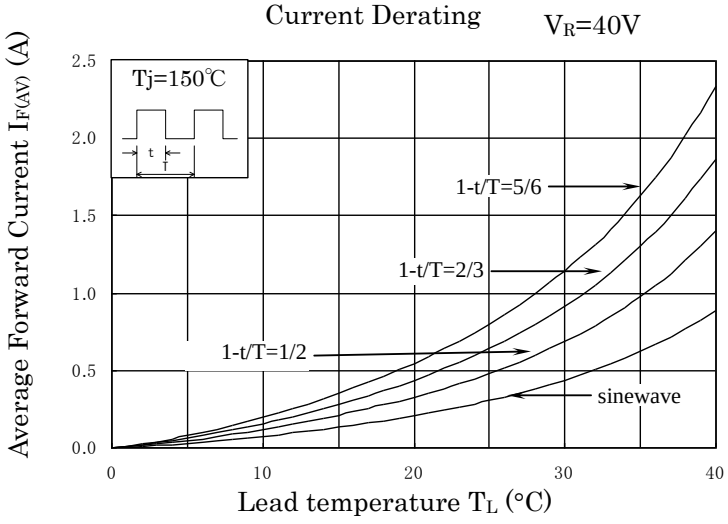
Forward Power Dissipation



Reverse Power Dissipation

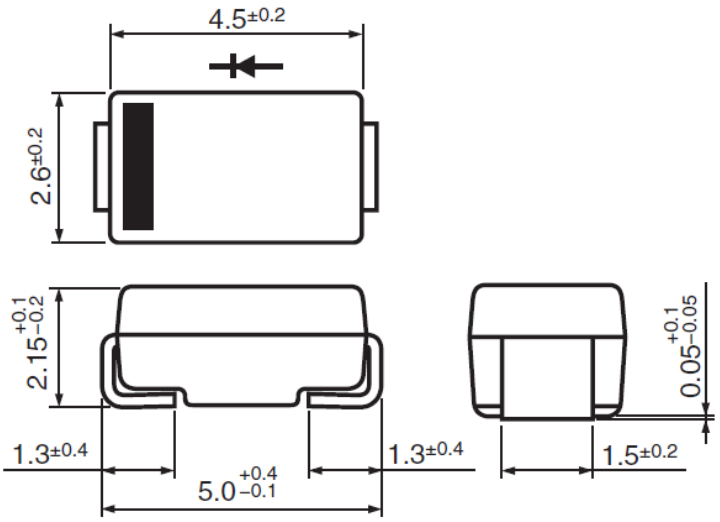


Current Derating V_R=40V



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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