

**SJPB-D9**

May. 2016

Schottky Barrier Rectifier

**General Description**

SJPB-D9 is a Schottky Barrier Diode, and has achieved low leakage current and low VF by selecting the best barrier metal.

**Applications**

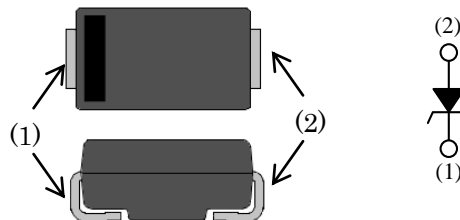
- DC-DC converters
- AC adapter
- High frequency rectification circuit

**Features**

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

**Package**

SJP



(1) Cathode  
(2) Anode

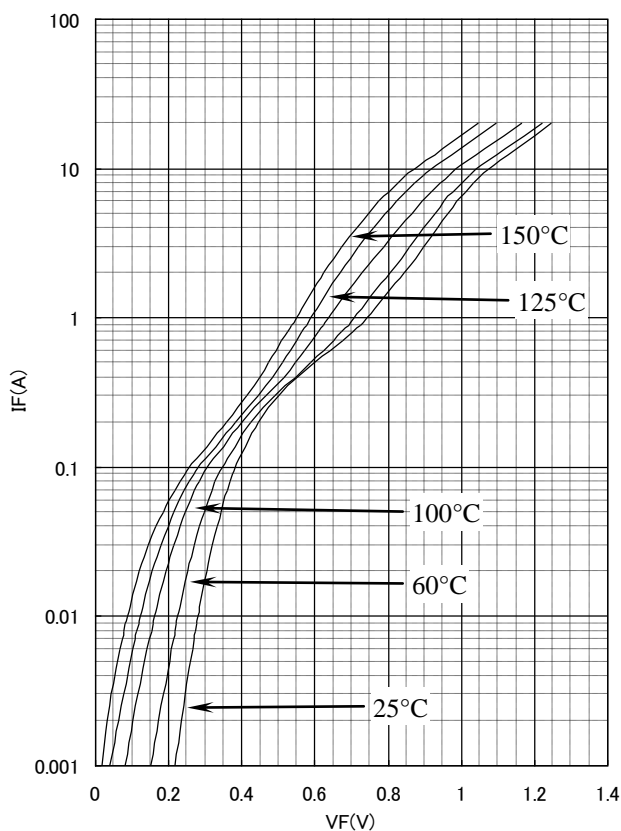
Not to Scale

**Key Specifications**

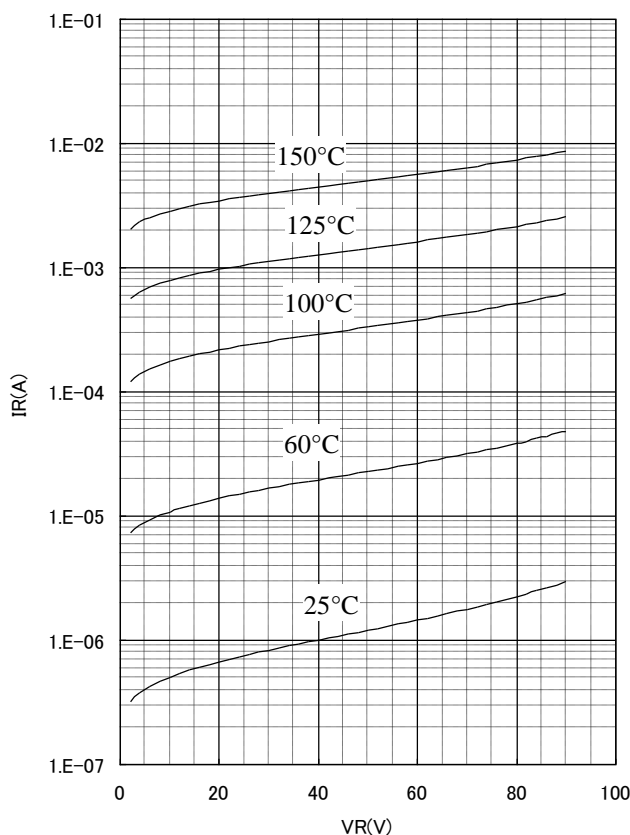
Item	Rating	Unit	Conditions
$V_{RM}$	90	V	
$V_F$	0.85	V	$I_F=1.0A$
$I_{F(AV)}$	1.0	A	

**Typical Characteristics**

SJPB-D9 IF-VF Characteristics



SJPB-D9 VR-IR Characteristics



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### Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	$V_{RSM}$	V	90	
2	Peak Reverse Voltage	$V_{RM}$	V	90	
3	Average Forward Current	$I_{F(AV)}$	A	1.0	
4	Peak Surge Forward Current	$I_{FSM}$	A	20	Half sine-wave, one shot
5	$I^2t$ Limiting Value	$I^2t$	$A^2s$	2.0	$1ms \leq t \leq 10ms$
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	0.85 max.	$I_F=1.0A$
2	Reverse Leakage Current	$I_R$	$\mu A$	100 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	30 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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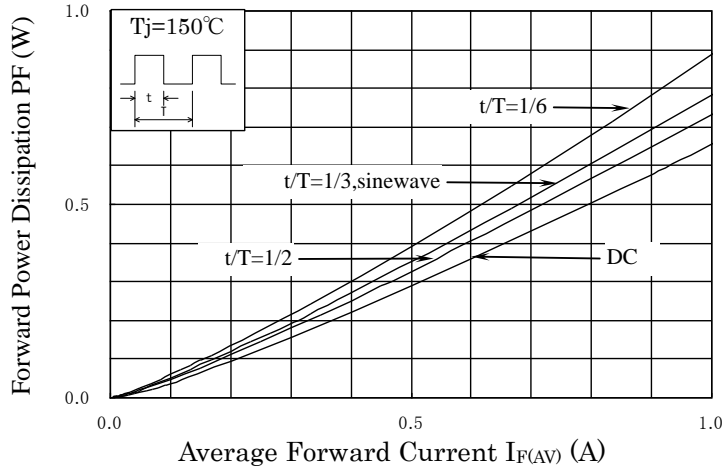
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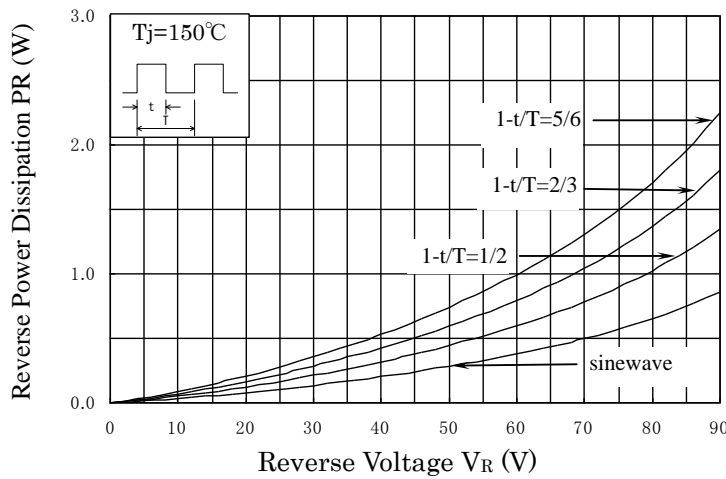
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**Characteristics**

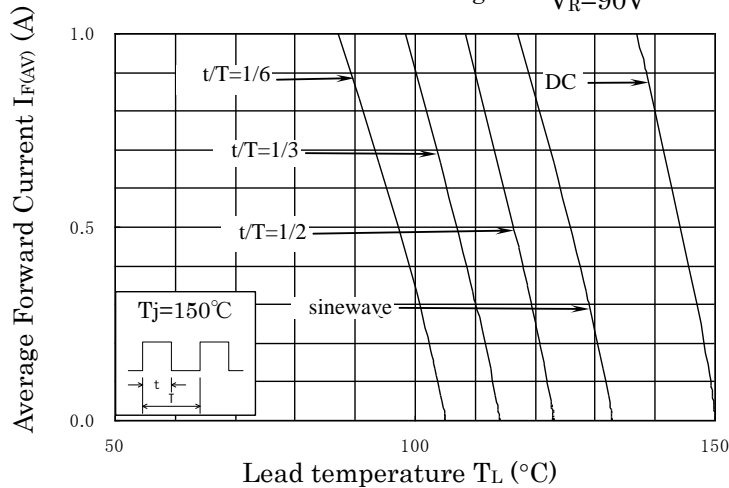
Forward Power Dissipation



Reverse Power Dissipation



Current Derating  $V_R=90\text{V}$



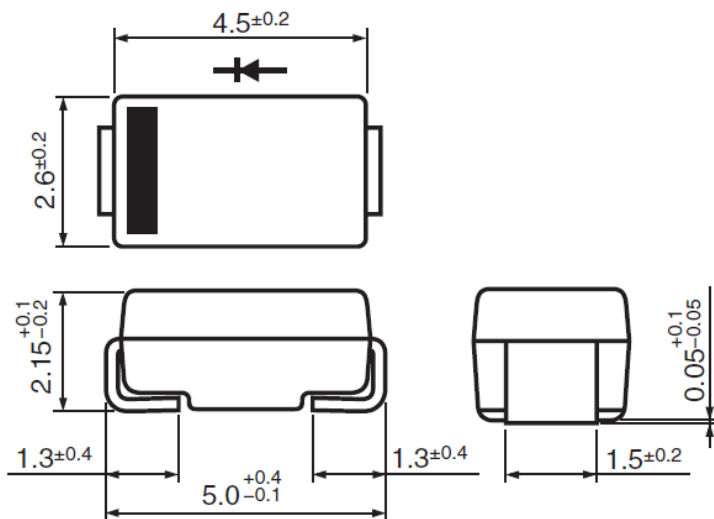
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May. 2016

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### Outline drawings

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### NOTES:

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

### Connection Diagram



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