

**SJPX-H6**

Fast Recovery Diode

May. 2016

**General Description**

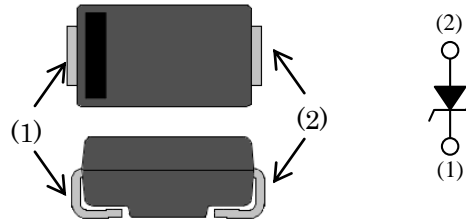
SJPX-H6 has the characteristics of low VF and superior tr at high temperature. High efficiency is achieved by reducing the loss of circuit at high temperature.

**Applications**

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

**Package**

SJP



(1) Cathode

(2) Anode

Not to Scale

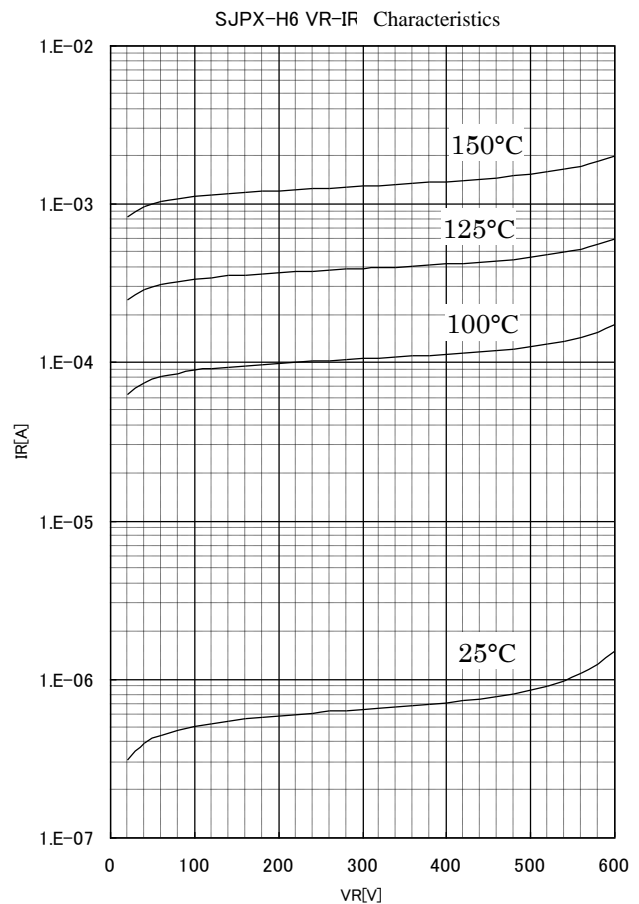
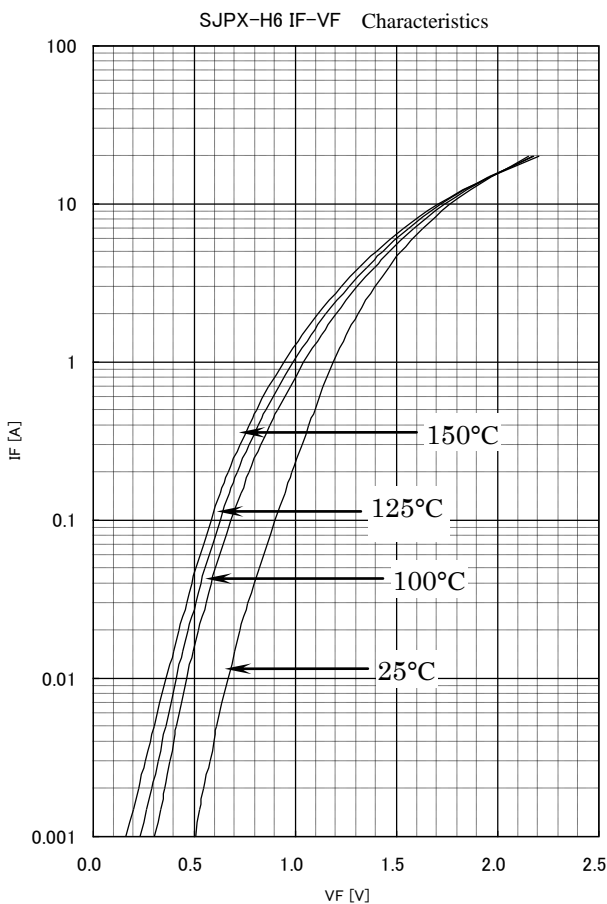
**Features**

- Super-high speed FRD
- Low leakage current at high temperature

**Key Specifications**

Item	Rating	Unit	Conditions
$V_{RM}$	600	V	
$V_F$	1.5	V	$I_F=2.0A$
$I_{F(AV)}$	2.0	A	
$t_{rr}$	20	ns	100mA/200mA

**Typical Characteristics**



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## Absolute maximum ratings

No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	$V_{RSM}$	V	600	
2	Peak Reverse Voltage	$V_{RM}$	V	600	
3	Average Forward Current	$I_{F(AV)}$	A	2.0	
4	Peak Surge Forward Current	$I_{FSM}$	A	20	Half sine-wave, one shot
5	$I^2t$ Limiting Value	$I^2t$	A <sup>2</sup> s	2.0	1ms ≤ t ≤ 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	1.5 max.	$I_F=2.0A$
2	Reverse Leakage Current	$I_R$	uA	10 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	3.0 max.	$V_R=V_{RM}, T_j=150^\circ C$
4	Reverse Recovery Time	$t_{rr1}$	ns	30 max.	$I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^\circ C$
		$t_{rr2}$	ns	20 max.	$I_F=100mA, I_{RP}=200mA$ 75% Recovery point, $T_j=25^\circ C$
5	Thermal Resistance	$R_{th(j-c)}$	°C /W	20 max.	Between Junction and Lead

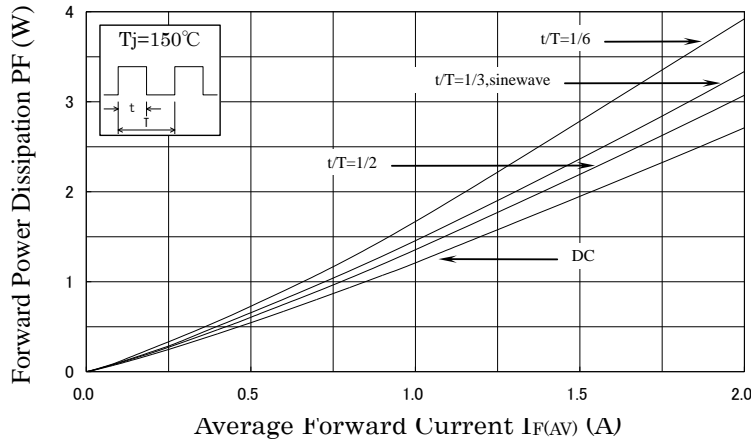
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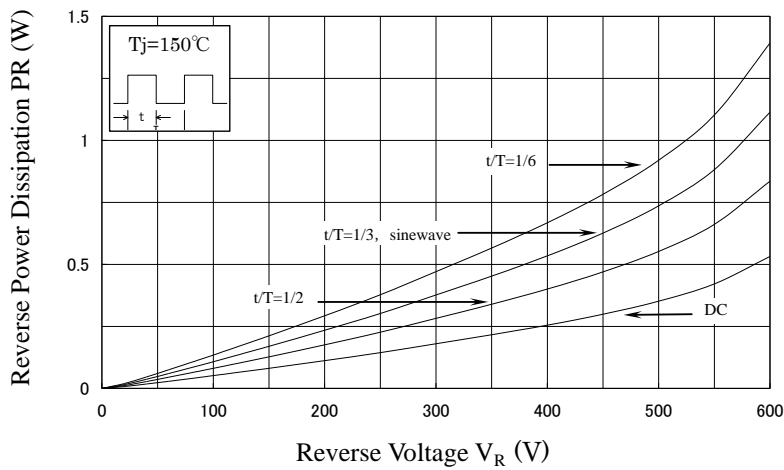
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**Characteristics**

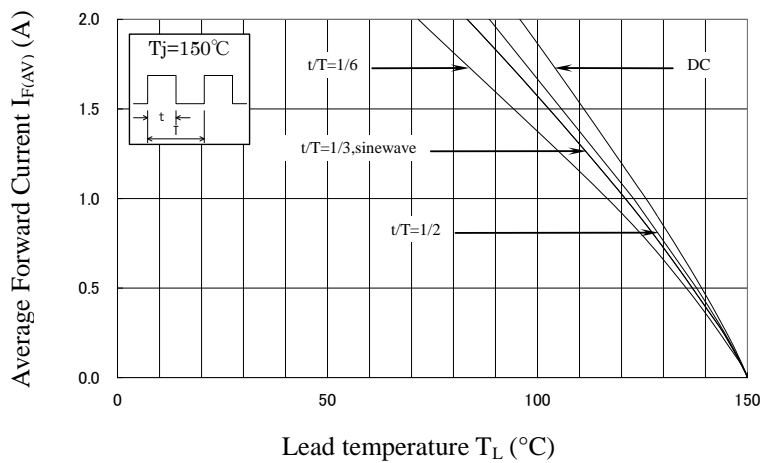
Forward Power Dissipation



Reverse Power Dissipation



Current Derating  $V_R=0\text{V}$



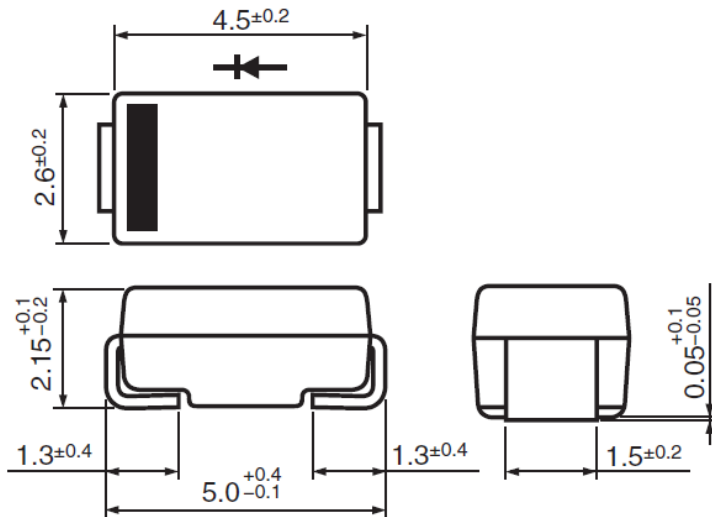
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**External Dimensions**

SJP



NOTES:

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

**Connection Diagram**



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