Fast Recovery Diode

May. 2016

General Description

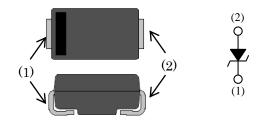
SJPX-H3 has the characteristics of low VF and superior trr at high temperature. High efficiency is achieved by reducing the loss of circuit at high temperature.

Applications

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

Package

SJP



- (1) Cathode
- (2) Anode

Not to Scale

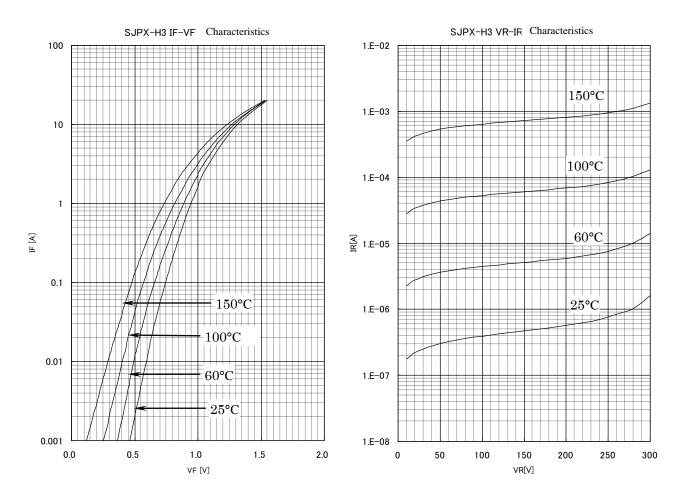
Features

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

Key Specifications

Item	Item Rating		Conditions
V _{RM}	300	V	
$V_{\rm F}$	1.3	V	I _F =2.0A
I _{F(AV)}	2.0	A	
t _{rr}	25	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	300	
2 Peak Reverse Voltage		V_{RM}	V	300	
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 ² t Limiting Value		I^2t	A^2s	2.0	$1ms \le t \le 10ms$
6 Junction Temperature		T_{j}	°C	-40 to 150	
7 Storage Temperature		T_{stg}	°C	-40 to 150	

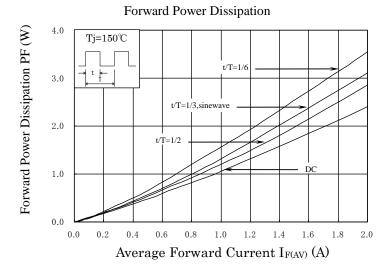
Electrical characteristics (Ta=25°C, unless otherwise specified)

No.	Item	Symbol	Unit	Value	Conditions
1 Forward Voltage Drop		V_{F}	V	1.3 max.	I _F =2.0A
2 Reverse Leakage Current		I_R	μΑ	50 max.	$V_R = V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	mA	3.0 max.	$V_R=V_{RM}, T_j=150$ °C
4	Reverse Recovery Time	t _{rr} 1	ns	30 max.	$I_F=I_{RP}=100$ mA 90% Recovery point, $T_j=25$ °C
		t _{rr} 2	ns	25 max.	I _F =100mA, I _{RP} =200mA 75% Recovery point, T _j =25°C
5	5 Thermal Resistance		c/W	20 max.	Between Junction and Lead

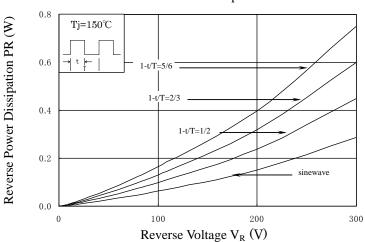
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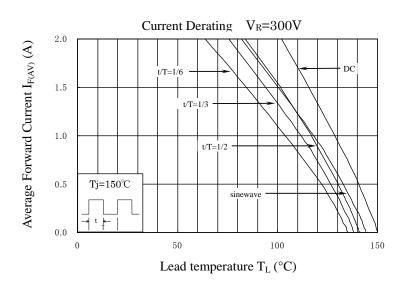
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Characteristics



Reverse Power Dissipation





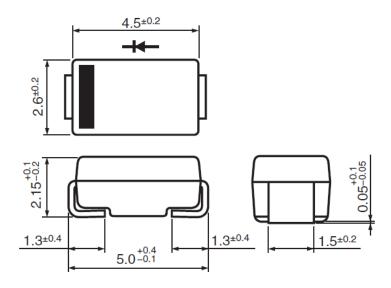
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External Dimensions

Fast Recovery Diode

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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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