



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SJPX-H6

Fast Recovery Diode

May. 2016

General Description

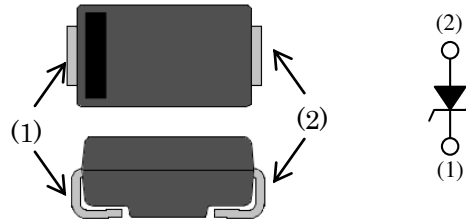
SJPX-H6 has the characteristics of low VF and superior tr at high temperature. High efficiency is achieved by reducing the loss of circuit at high temperature.

Applications

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

Package

SJP



(1) Cathode

(2) Anode

Not to Scale

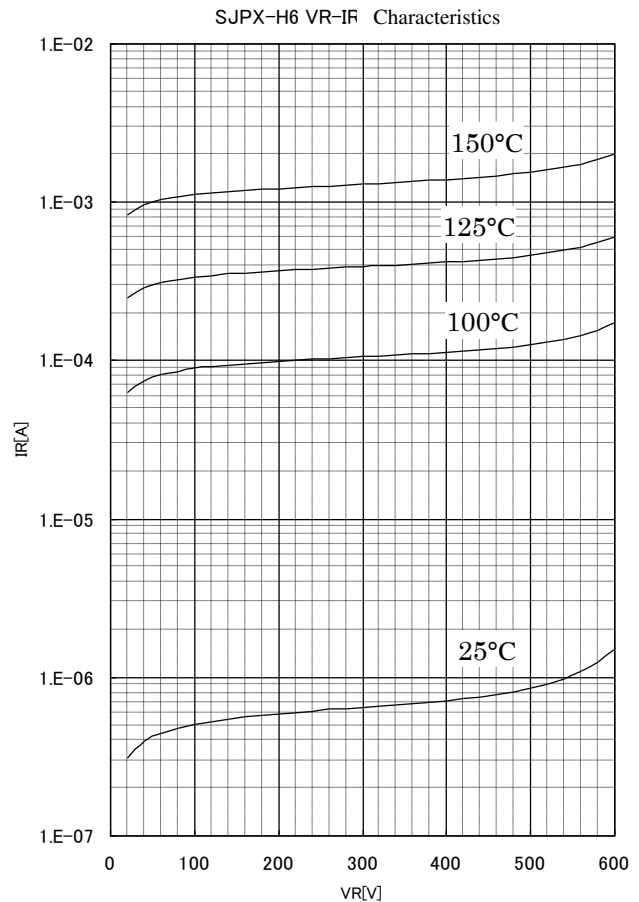
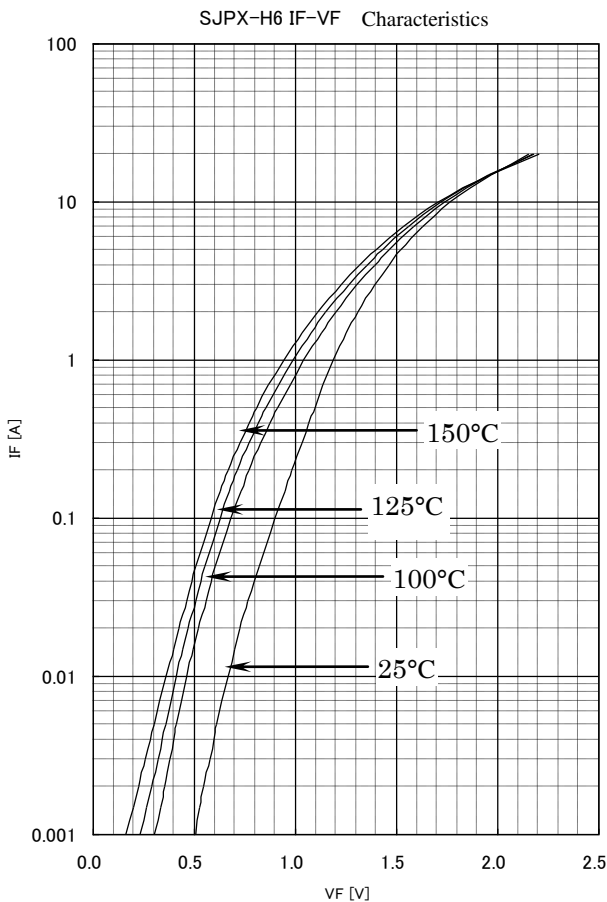
Features

- 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^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 (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	μA	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	$R_{th(j-c)}$	$^{\circ}C/W$	20 max.	Between Junction and Lead

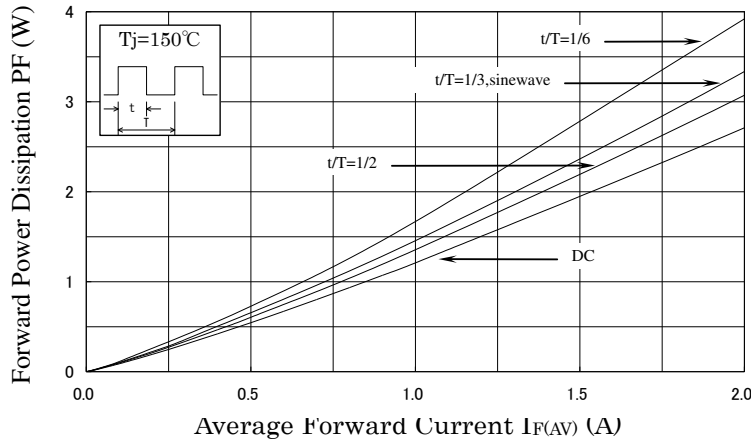
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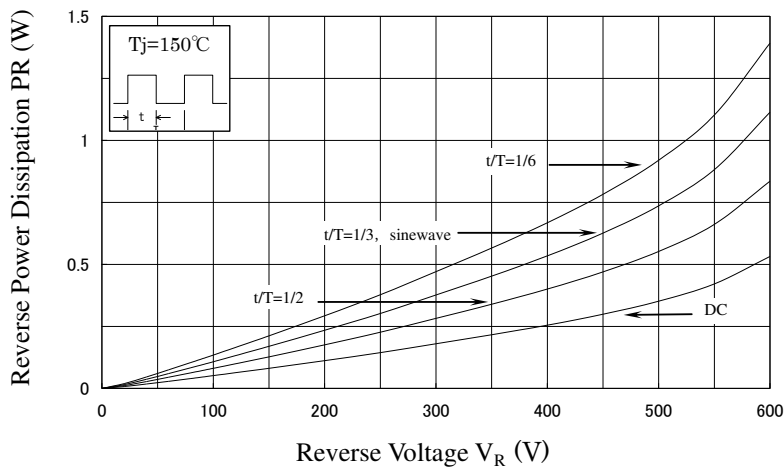
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Characteristics

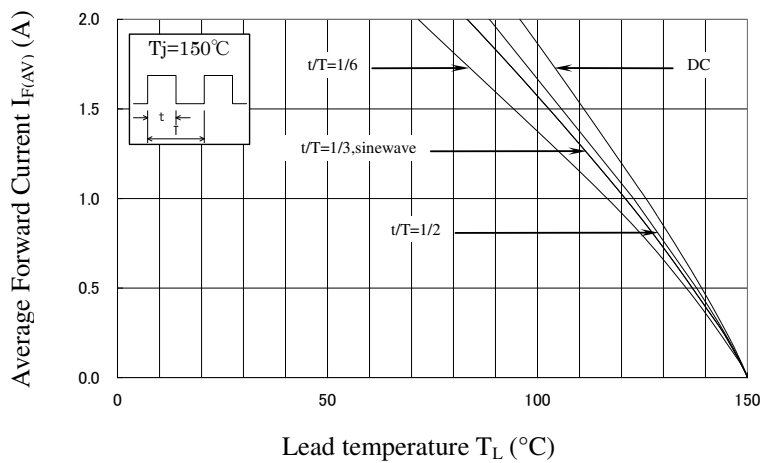
Forward Power Dissipation



Reverse Power Dissipation



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



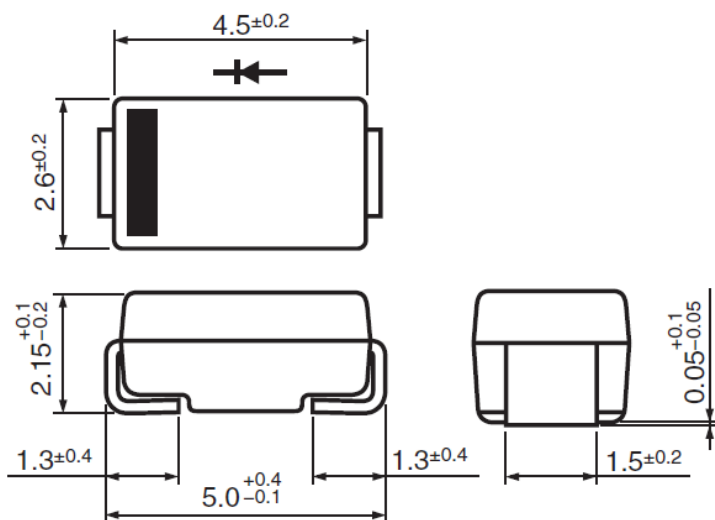
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Fast Recovery Diode

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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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