



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SJPL-L4

Fast Recovery Diode

May. 2016

General Description

SJPL-L4 realizes low leakage current at high temperature. High efficiency is achieved by reducing the loss of circuit at high temperature.

Applications

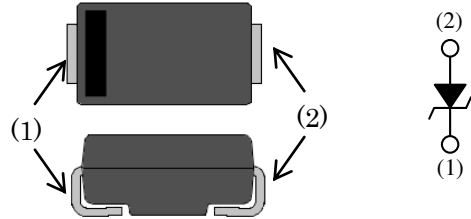
- DC-DC converters
- AC adapter
- High frequency rectification circuit

Features

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

Package

SJP



(1) Cathode

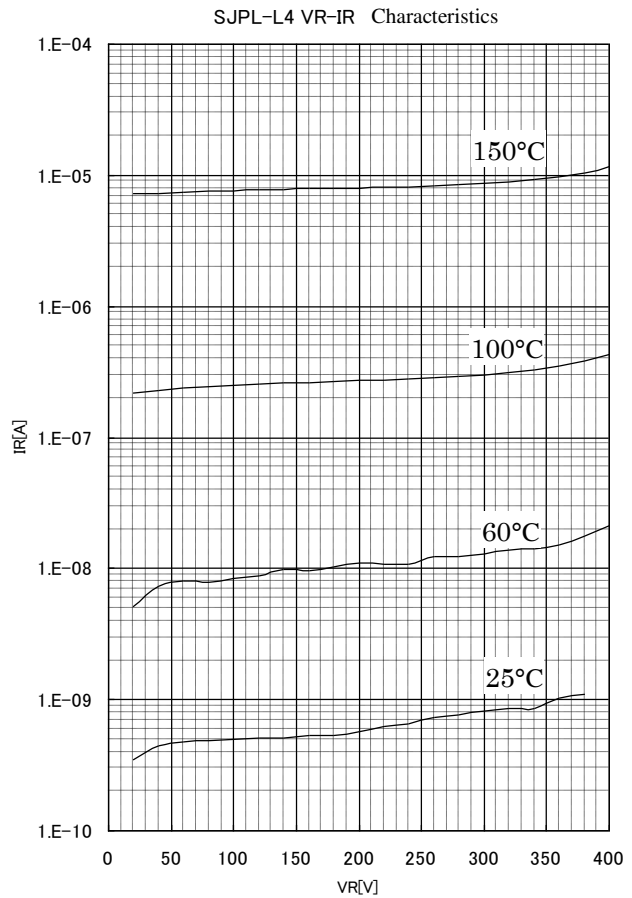
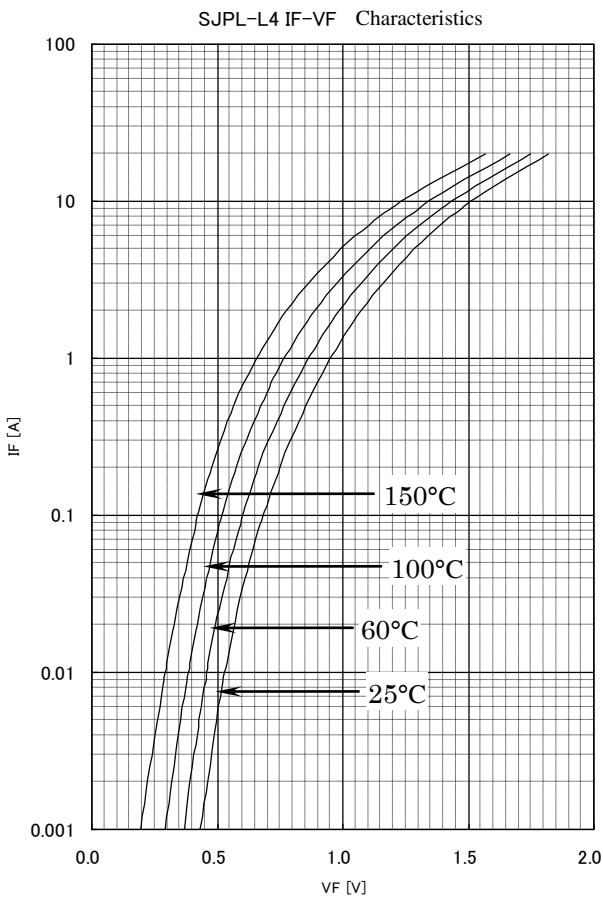
(2) Anode

Not to Scale

Key Specifications

Item	Rating	Unit	Conditions
V_{RM}	400	V	
V_F	1.3	V	$I_F=3.0A$
$I_{F(AV)}$	3.0	A	
t_{rr}	35	ns	100mA/200mA

Typical Characteristics



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Absolute maximum ratings

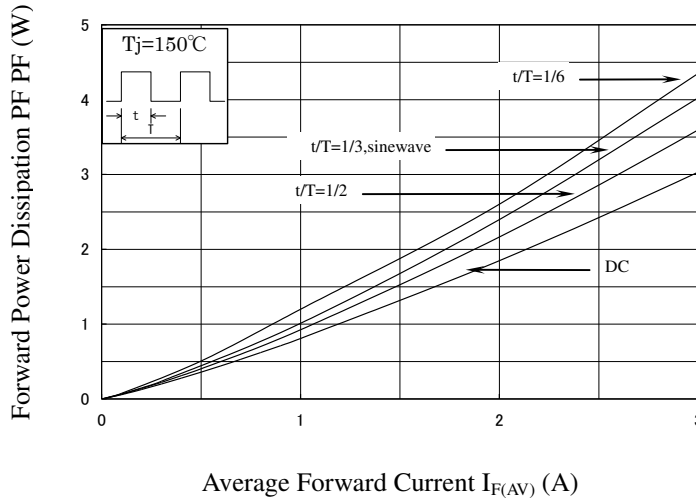
No.	Item	Symbol	Unit	Rating	Conditions
1	Transient Peak Reverse Voltage	V_{RSM}	V	400	
2	Peak Reverse Voltage	V_{RM}	V	400	
3	Average Forward Current	$I_{F(AV)}$	A	3.0	
4	Peak Surge Forward Current	I_{FSM}	A	30	Half sine-wave, one shot
5	I^2t Limiting Value	I^2t	A^2s	4.5	$1ms \leq t \leq 10ms$
6	Junction 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)

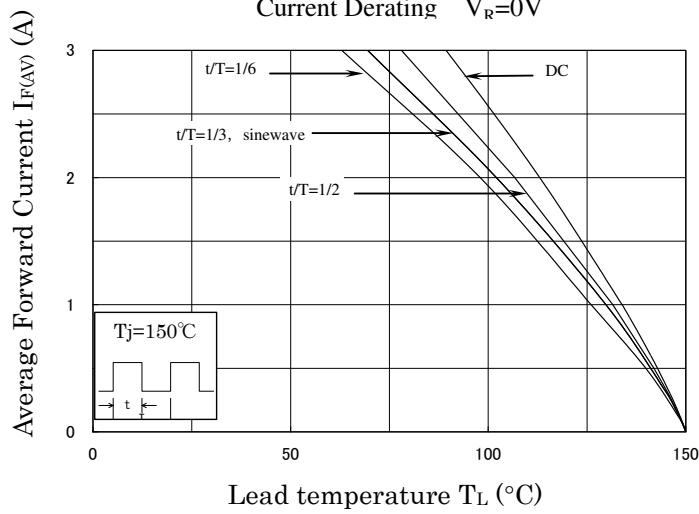
No.	Item	Symbol	Unit	Value	Conditions
1	Forward Voltage Drop	V_F	V	1.3 max.	$I_F=3.0A$
2	Reverse Leakage Current	I_R	μA	50 max.	$V_R=V_{RM}$
3	Reverse Leakage Current Under High Temperature	$H \cdot I_R$	μA	100 max.	$V_R=V_{RM}, T_j=150^{\circ}C$
4	Reverse Recovery Time	t_{rr1}	ns	50 max.	$I_F=I_{RP}=100mA$ 90% Recovery point, $T_j=25^{\circ}C$
		t_{rr2}	ns	35 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

Characteristics

Forward Power Dissipation



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

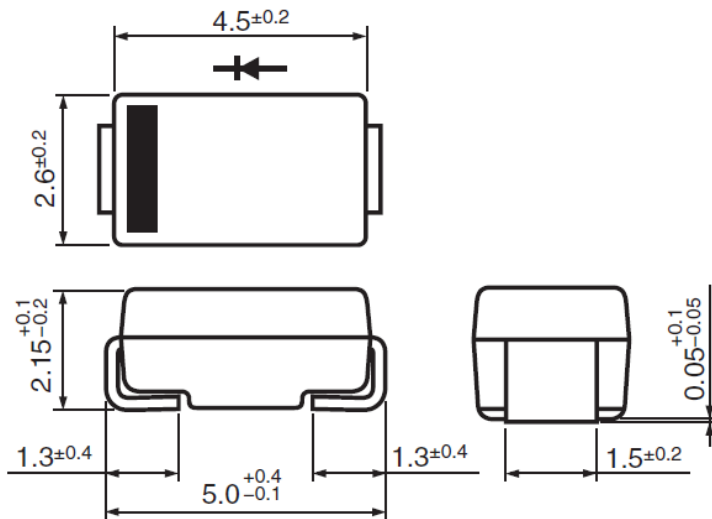


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Outline drawings

- SJP



NOTES:

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

Connection Diagram



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