

FEATURES

| The Plastic Package Carries Underwriters Laboratory

Flammability Classification 94V-0

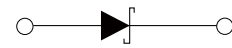
| Guardring For Overvoltage Protection

| Low Reverse Leakage

| High Forward Surge Current Capability



R-6/P-600



Schematic Symbol

APPLICATIONS

| Case : Molded Plastic Body

| Polarity : Polarity Symbol Marking On Body

| Mounting Position : Any

APPROVALS

RoHS Compliance with 2011/65/EU

HF Compliance with IEC61249-2-21:2003

MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$)

Parameter	Symbol	Value	Unit
Marking		15SQ100	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current at $T_L=100^{\circ}\text{C}$	$I_{F(AV)}$	15.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I_{FSM}	320.0	A
Maximum Instantaneous Forward Voltage at 15.0A	V_F	0.85	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^{\circ}\text{C}$ 0.05	mA
		$T_A=100^{\circ}\text{C}$ 5	mA
Typical Thermal Resistance	$R_{\theta JA}$	40.0	$^{\circ}\text{C/W}$
Junction Temperature@ In DC Forward Mode-forward Operations, without Reverse Bias, $T \leq 1\text{H}$ (Fig. 1)①	T_J	-55 to +200	$^{\circ}\text{C}$
Current Squared Time $1\text{ms} \leq t < 8.3\text{ms}$ $T_J=25^{\circ}\text{C}$	I^2t	427	A^2S
Storage Temperature	T_{STG}	-55 to +200	$^{\circ}\text{C}$

Note:

① Meets the requirements of IEC 61215 Ed. 2 bypass diode thermal test.

CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

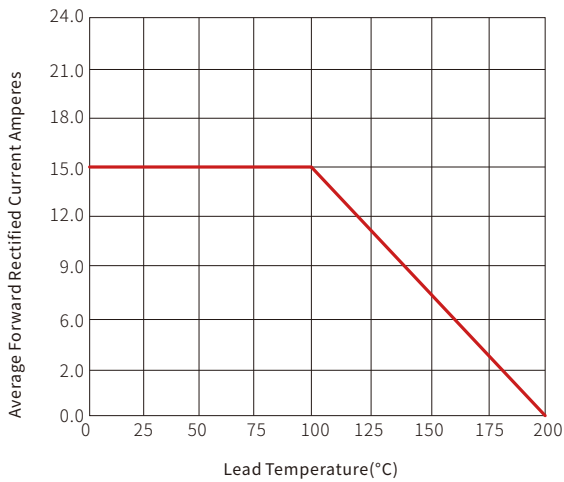


Fig. 2-maximum Non-repetitive Peak Forward Surge Current Perleg

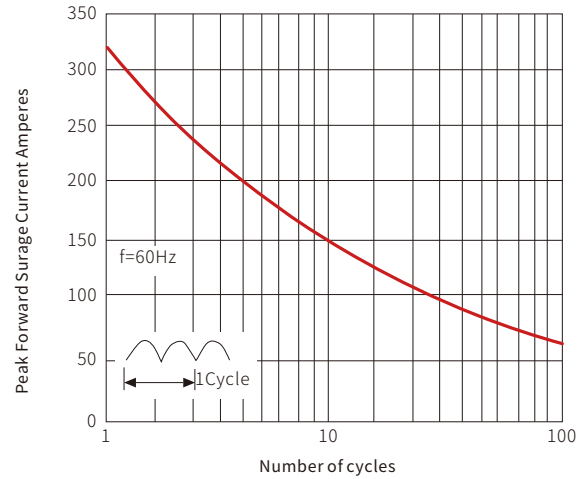


Fig. 3-Typical Forward Voltage Characteristics

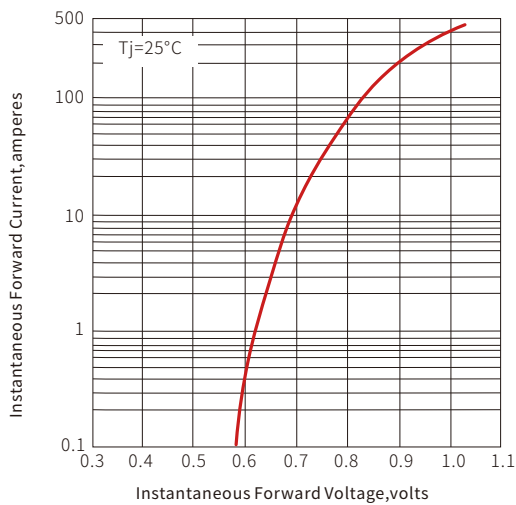
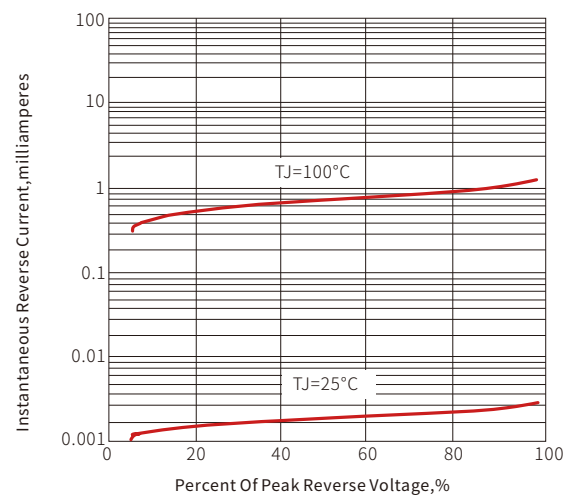
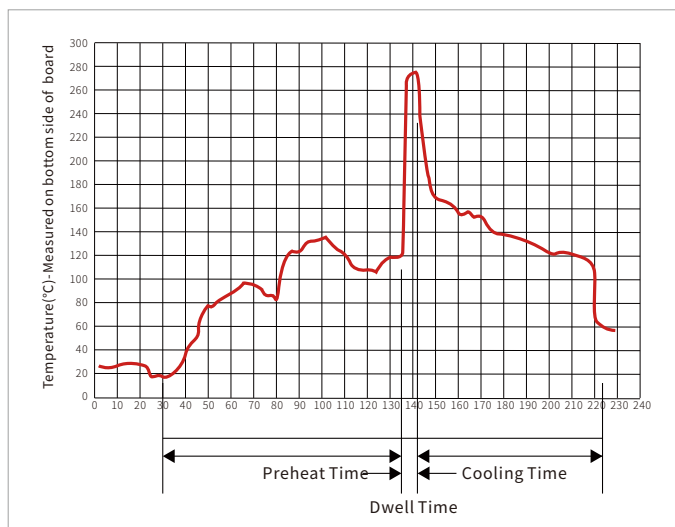


Fig. 4-Typical Reverse Leakage Characteristics

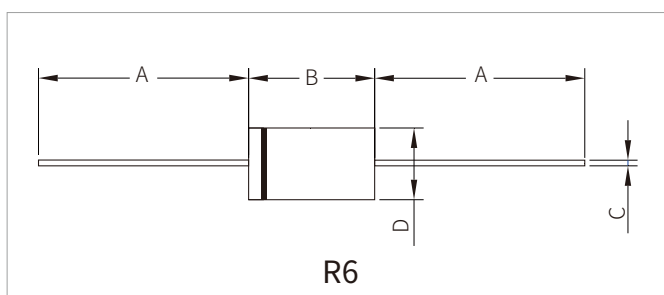


WAVE SOLDERING



Wave Parameter		Lead-free assembly
Pre Heat	Temperature Min	100°C
	Temperature Max	150°C
	Time(min to max)	60 – 180 secs
Solder pot Temperature		280°C Max
Solder Dwell Time		2-5 seconds

P600 PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	25.40	-	1.000	-
B	8.60	9.40	0.339	0.370
C	1.20	1.40	0.047	0.055
D	8.60	9.10	0.339	0.358

ORDERING INFORMATION

Part Number	Component Package	QTY/Box	Q'TY/Carton
15SQ100HTC	R6/P600	500pcs	5000pcs

Headquarters

No.3387 Shendu Road
Pujiang I&E Park
Minhang Shanghai China
201000

Hotline

400-021-5756

Web

<https://www.semiware.com>

Sales Center

Tel: 86-21-3463-7458
Email: sales18@semiware.com

Customer Service

Tel: 86-21-5484-1001
Email: sales17@semiware.com

Technical Support

Tel: 86-21-3463-7654
Email: fae01@semiware.com

Complaint & Suggestions

Tel: 86-21-3463-7172
Ext: 8868
Email: cs03@semiware.com

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