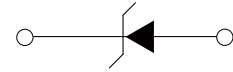


## FEATURES

- | 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

<b>RoHS</b>	Compliance with 2011/65/EU
<b>HF</b>	Compliance with IEC61249-2-21:2003

## MAXIMUM RATINGS (T<sub>A</sub> = 25°C )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	45	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	30.5	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	45	V
Maximum Average Forward Rectified Current at T <sub>L</sub> =110°C	I <sub>(AV)</sub>	30.0	A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed On Rated Load	I <sub>FSM</sub>	400	A
Typical Thermal Resistance	R <sub>θJA</sub>	25	°C/W
	R <sub>θJL</sub>	10	°C/W
Operating Junction Temperature	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

# ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ )

Parameter	Symbol	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage at 30.0A	$V_F$		0.52	0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$		50	200	$\mu\text{A}$
			5	20	mA

## CHARACTERISTIC CURVES

Fig. 1- Derating Curve Output Rectified Current

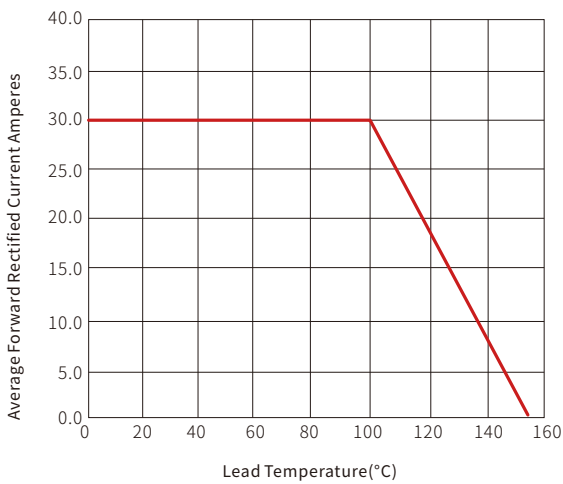


Fig. 2-maximum Non-repetitive Peak Forward Surge Current Perleg

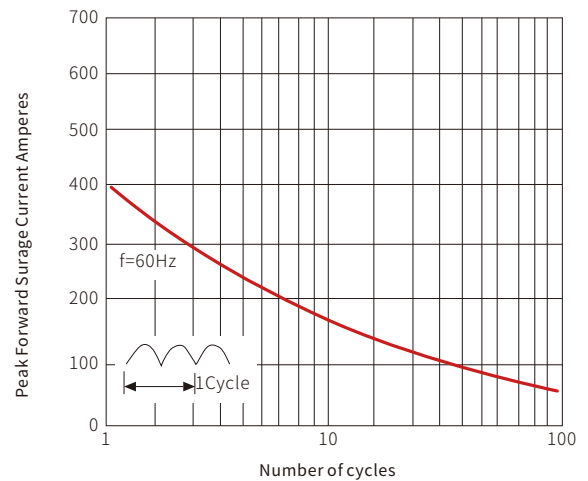


Fig. 3-Typical Forward Voltage Characteristics

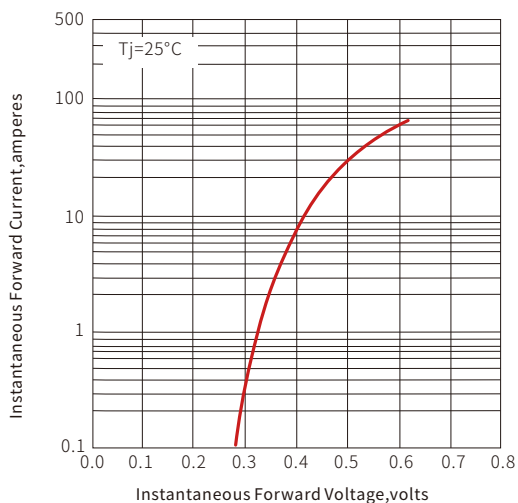
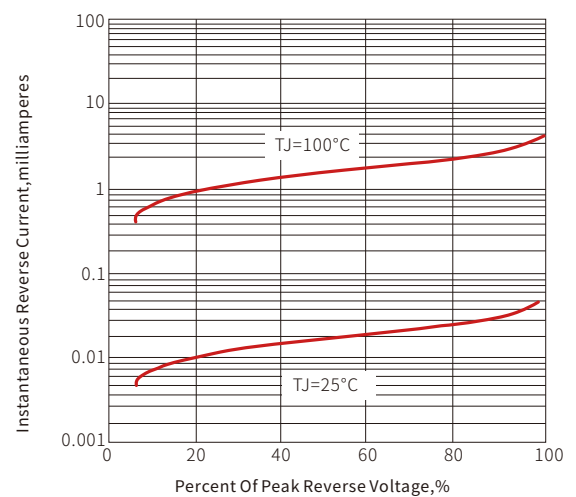
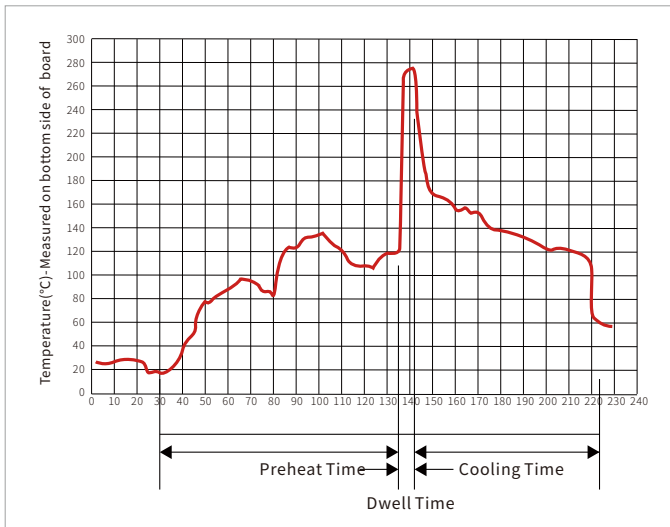


Fig. 4-Typical Reverse Leakage Characteristics

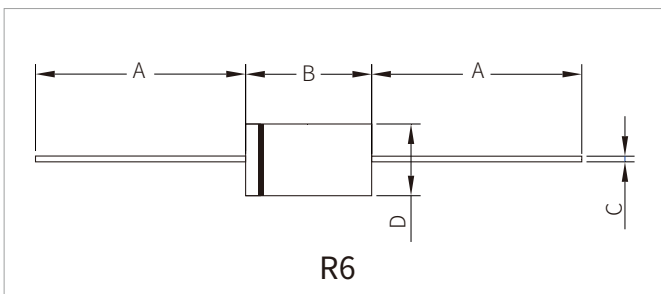


## WAVE SOLDERING



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	Marking	Component Package	QTY/Box	Q'TY/Carton
30SQ045	30SQ045	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](mailto:sales18@semiware.com)

**Customer Service**

Tel: 86-21-5484-1001  
Email: [sales17@semiware.com](mailto:sales17@semiware.com)

**Technical Support**

Tel: 86-21-3463-7654  
Email: [fae01@semiware.com](mailto:fae01@semiware.com)

**Complaint & Suggestions**

Tel: 86-21-3463-7172  
Ext: 8868  
Email: [cs03@semiware.com](mailto:cs03@semiware.com)

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