

FEATURES

- | Open-Junction Chip ,Silastic Passivated
- | Low Reverse Leakage
- | Low Forward Voltage Drop
- | High Forward Surge Current Capability



R-6/P-600



Schematic Symbol

MECHANICAL DATA

- | Case: JEDEC R-6 Molded Plastic
- | Polarity: Color Band Denotes Cathode
- | Mounting Position: Any

APPROVALS

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

MAXIMUM RATINGS AND CHARACTERISTICS (T_A=25°C)

Parameter	Symbol	6A05	6A1	6A2	6A4	6A6	6A8	6A10	Unit
Marking		6A05	6A1	6A2	6A4	6A6	6A8	6A10	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T _L =100°C	I _{F(AV)}	6.0							A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	200							A
Instantaneous Forward Voltage I _F =6.0A ⁽²⁾	V _F	1.1							V
Reverse Current V _R =V _{DC}	T _A =25°C	10							μA
	T _A =100°C	500							μA
Typical Junction Capacitance 4.0V,1MHz	C _J	150							pF
Thermal Resistance From Junction to Lead ⁽¹⁾	R _{θJL}	4.0							°C/W
Operating Junction Temperature Range	T _J	-55 to +125							°C
Storage Temperature Range	T _{STG}	-55 to +125							°C

Notes:

Note 1: Thermal resistance from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted.

Note 2: Pulse test: 300μs pulse width, 1% duty cycle

CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

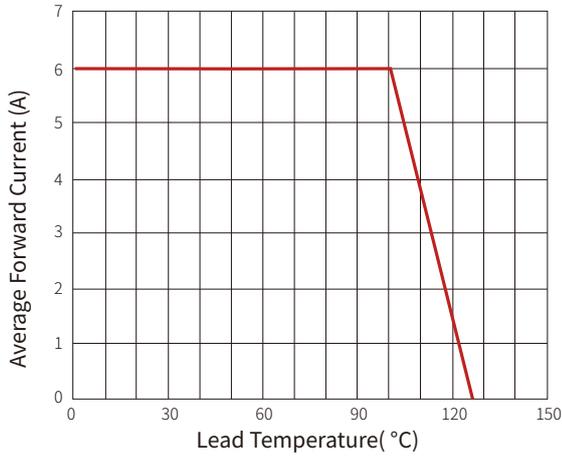


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

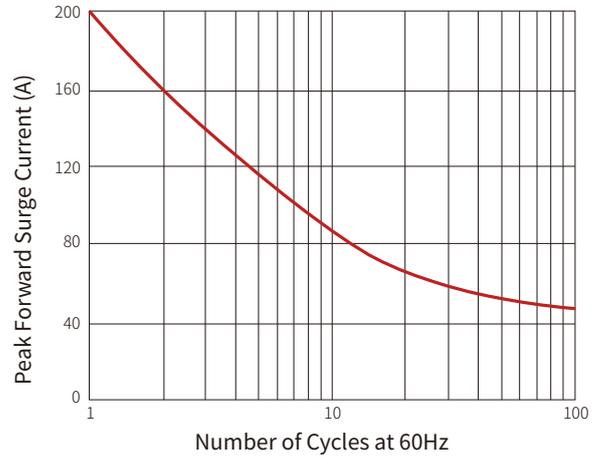


Fig.3 Typical Forward Current Characteristics

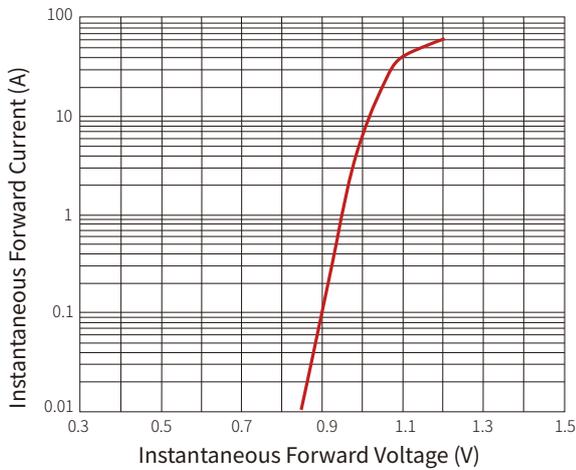
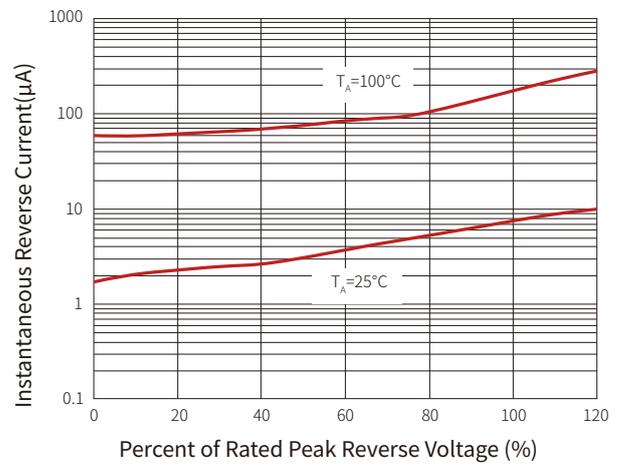
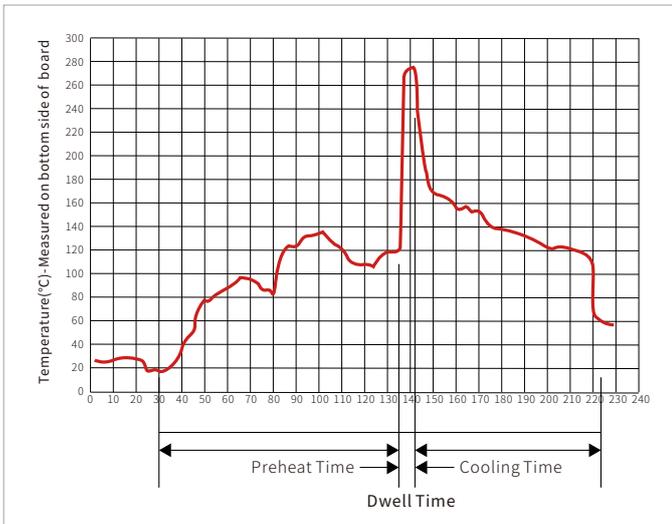


Fig.4 Typical Reverse Characteristics

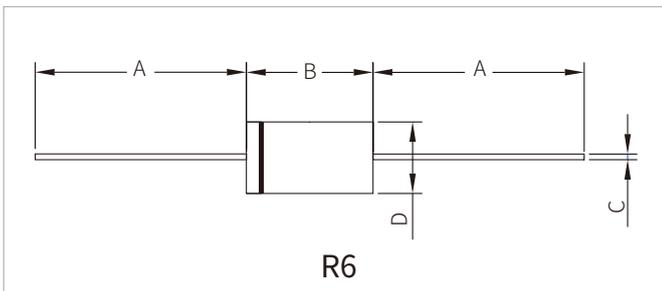


WAVE SOLDERING



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/Tape
6A05-6A10	R6/P600	400

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

By QR Code

Website



Wechat

To find your local partner within Semiware' s global website: www.semiware.com

© 2022 Semiware Semiconductor Inc.

The content of this document has been carefully checked and understood. However, neither Semiware nor its subsidiaries assume any liability whatsoever for any errors or inaccuracies of this document and the consequences thereof. Published specifications are subject to change without notice. Product suitability for any area of application must ultimately be determined by the customer. In all cases, products must never be operated outside their published specifications. Semiware does not guarantee the availability of all published products. This disclaimer shall be governed by substantive Chinese law and resulting disputes shall be settled by the courts at the place of business of Semiware. Latest publications and a complete disclaimer can be downloaded from the Semiware website. All trademarks recognized.