

FEATURES

- | High Current Capability
- | High Surge Current Capability
- | High Reliability
- | Low Reverse Current
- | Low Forward Voltage Drop



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	20A05	20A1	20A2	20A4	20A6	20A8	20A10	Unit	
Marking		20A05	20A1	20A2	20A4	20A6	20A8	20A10		
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 _a =60°C	I _{F(AV)}	20.0							A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load(Jedec Method)	I _{FSM}	400							A	
Maximum Instantaneous Forward Voltage at I _F = 20A	V _F	1.0						1.1	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R							5.0	μA
	T _A =100°C	I _{R(HI)}							1.0	mA
Typical Junction Capacitance at 4.0V, 1MHz	C _J	150							pF	
Typical Thermal Resistance (1)	R _{θJA}	20							°C/W	
Operating Junction Temperature Range	T _J	-55 to +150							°C	
Storage Temperature Range	T _{STG}	-55 to +150							°C	

Notes:

Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted with 1.1" x 1.1" (30 x 30mm) copper pads

CHARACTERISTIC CURVES

Fig.1 Maximum Forward Current Derating Current

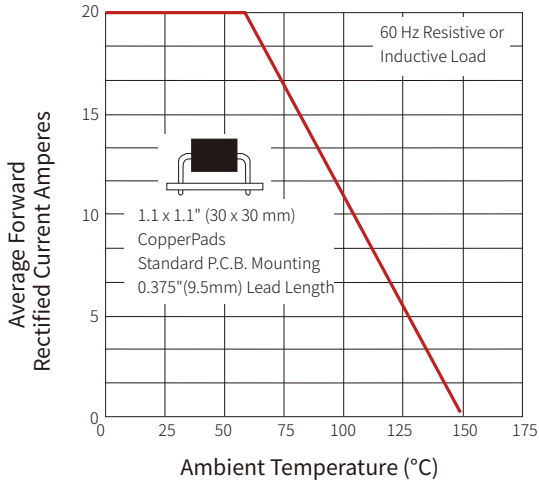


Fig.2 Typical Instantaneous Forward Characteristics

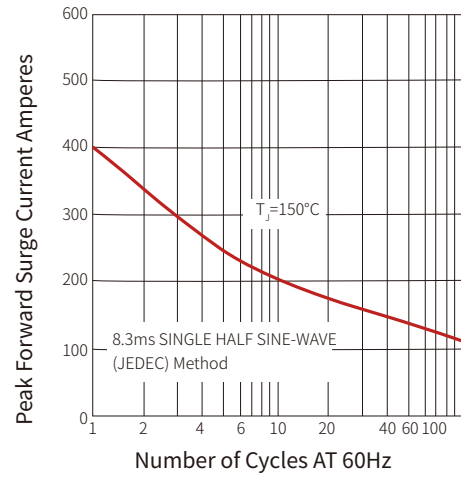


Fig.3 Typical Instantaneous Forward Characteristics

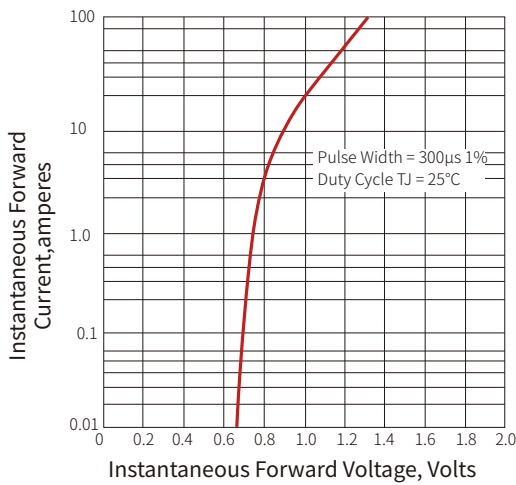
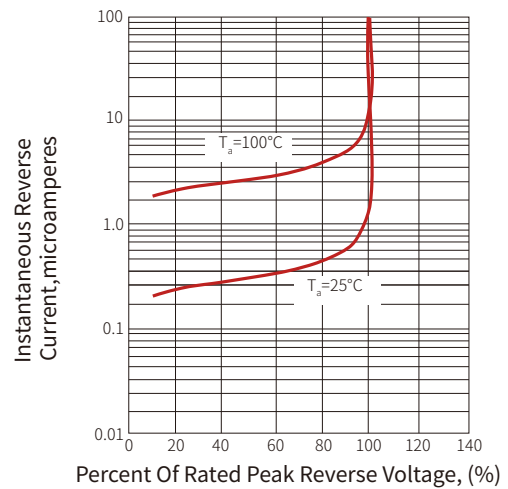
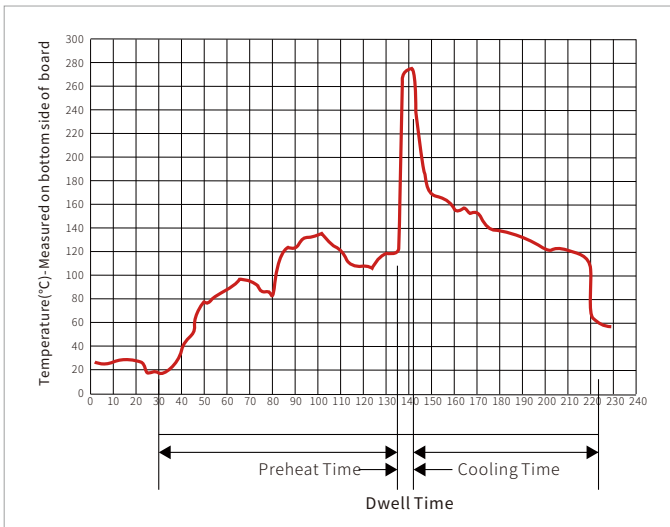


Fig.4 Typical Reverse Characteristics

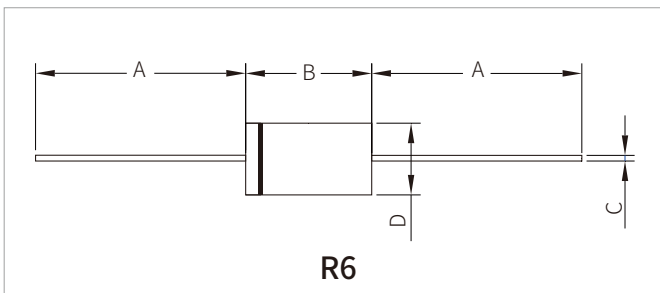


WAVE SOLDERING



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
20A05-20A10	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

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