

## 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

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

## MAXIMUM RATINGS AND CHARACTERISTICS (T<sub>A</sub> = 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 <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>L</sub> = 100°C	I <sub>F(AV)</sub>	6.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	200							A
Instantaneous forward voltage I <sub>F</sub> = 6.0A <sup>(2)</sup>	V <sub>F</sub>	1.1							V
Reverse current V <sub>R</sub> = V <sub>DC</sub>	T <sub>A</sub> = 25°C	10							uA
	T <sub>A</sub> = 100°C	500							uA
Typical junction capacitance 4.0V, 1MHz	C <sub>J</sub>	150							pF
Thermal resistance from junction to lead <sup>(1)</sup>	R <sub>θJL</sub>	4.0							°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +125							°C
Storage temperature range	T <sub>STG</sub>	-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

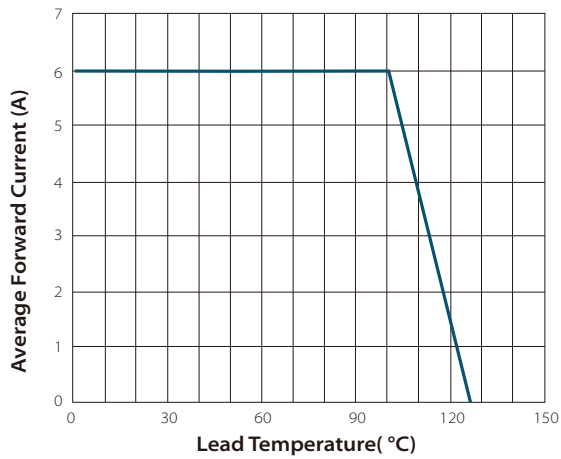


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

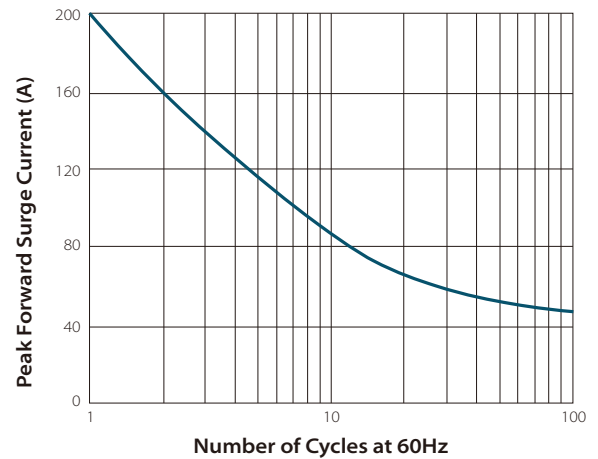


Fig.3 Typical Forward Current Characteristics

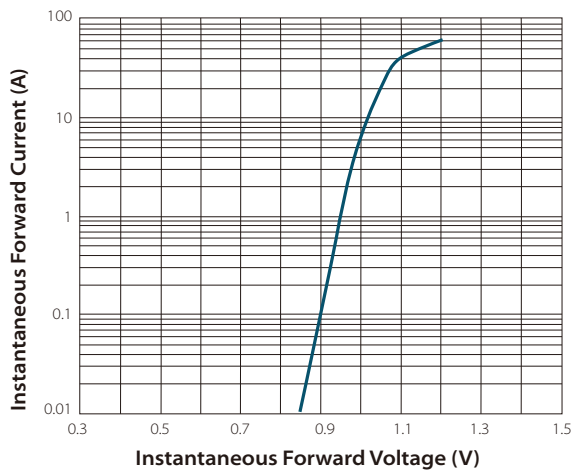
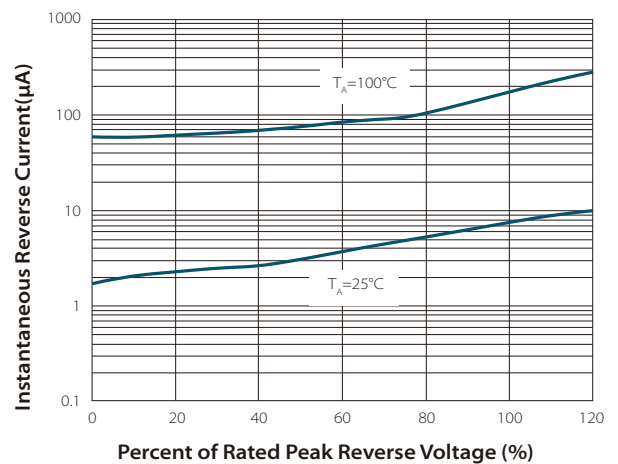
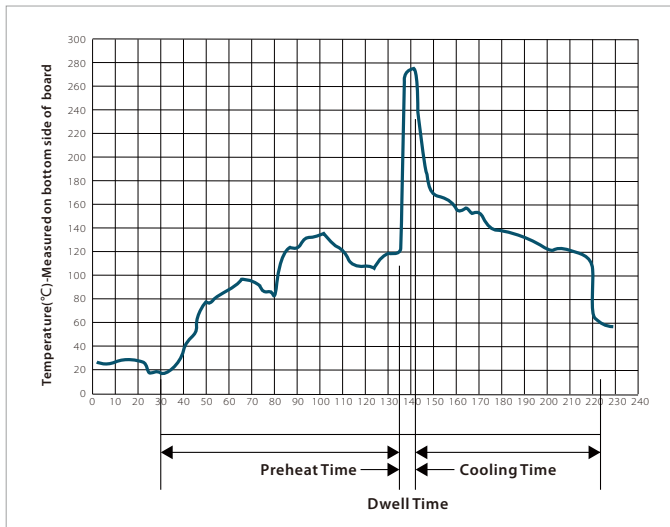


Fig.4 Typical Reverse Characteristics

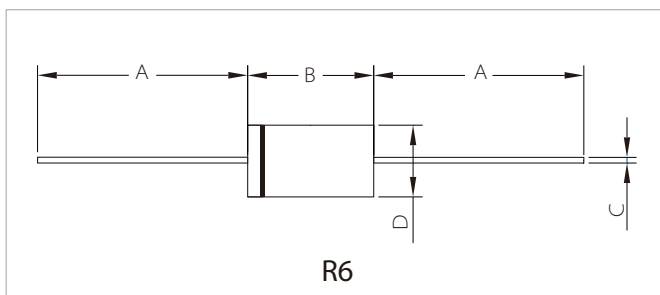


## WAVE SOLDERING



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

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