



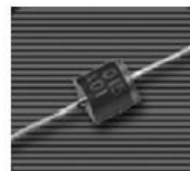
SYNSEMI SEMICONDUCTOR

6A05G thru 6A10G

6.0 Amps. Glass Passivated Junction Rectifiers
Voltage Range 50 to 1000 Volts Forward Current 6.0 Amperes

Features

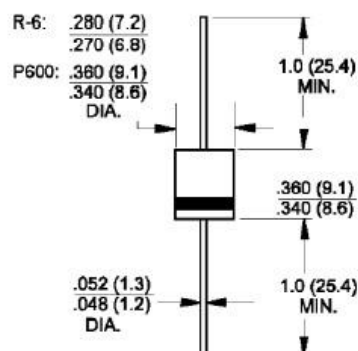
- ◆ Low forward voltage drop
- ◆ High current capability
- ◆ High reliability
- ◆ High surge current capability



R-6 or P600

Mechanical Data

- ◆ Case: Molded plastic R-6
- ◆ Epoxy: UL 94V-O rate flame retardant
- ◆ Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- ◆ Polarity: Color band denotes cathode end
- ◆ High temperature soldering guaranteed:
250°C/10 seconds .375" (9.5mm) lead
lengths at 5 lbs., (2.3kg) tension
- ◆ Weight: 0.074 ounce, 2.105 grams



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Parameter	Symbols	6A05G	6A1G	6A2G	6A4G	6A6G	6A8G	6A10G	Units	
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts	
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts	
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts	
Maximum average forward rectified current 0.375" (9.5mm) lead length @ T_{A} =50°C	I_{AO}	6.0							Amps	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400.0							Amps	
Maximum instantaneous forward voltage @ 6.0A	V_{F}	1.1		1.0					Volts	
Maximum DC reverse current @ T_{A} =25°C at rated DC blocking voltage @ T_{A} =125°C	I_{R}	10.0 100								μA
Typical junction capacitance (Note 1)	C_{J}	100							pF	
Operating and storage temperature range	$T_{\text{J}}, T_{\text{STG}}$	-65 to +150							°C	

Notes: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 V D.C.

6A05G thru 6A10G

RATINGS AND CHARACTERISTIC CURVES

($T_a = 25^\circ\text{C}$ unless otherwise noted)

FIG. 1- MAXIMUM FORWARD CURRENT DERATING CURVE

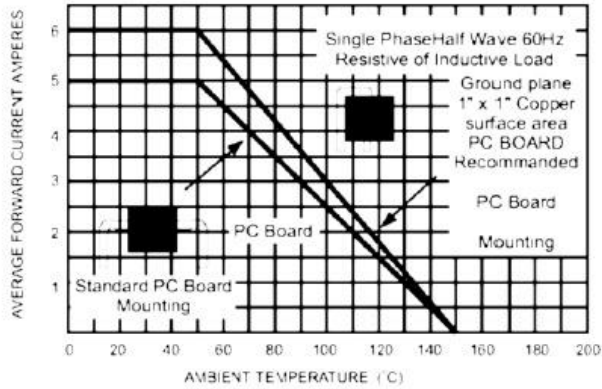


FIG. 2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

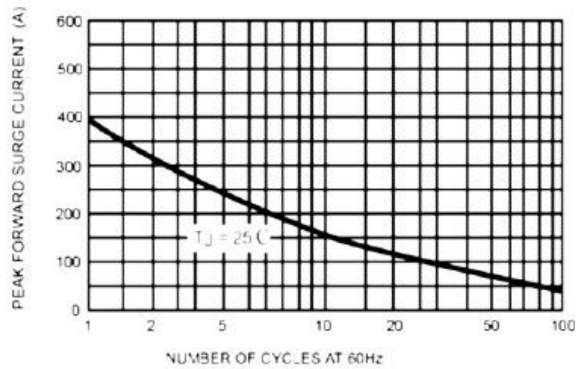


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

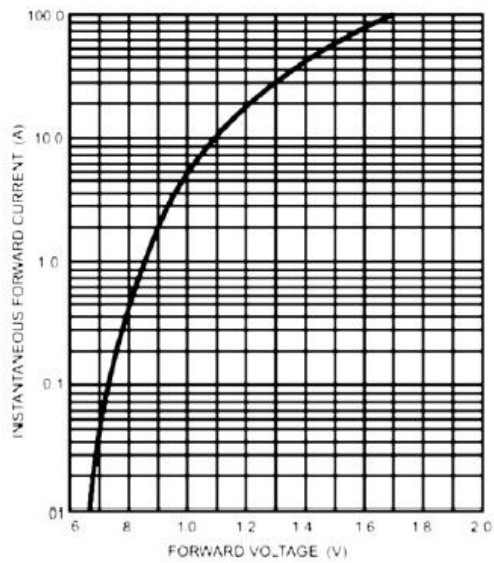


FIG. 4- TYPICAL JUNCTION CAPACITANCE

