

6A05G - 6A100G

6.0 AMPS. Glass Passivated Rectifiers

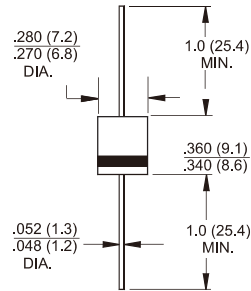
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Features

- ✧ Glass passivated chip junction.
- ✧ High efficiency, Low VF
- ✧ High current capability
- ✧ High reliability
- ✧ High surge current capability
- ✧ Low power loss
- ✧ Green compound with suffix "G" on packing code & prefix "G" on datecode.

Mechanical Data

- ✧ Cases: Molded plastic
- ✧ Epoxy: UL 94V-0 rate flame retardant
- ✧ Lead: Pure tin plated, lead free., solderable per MIL-STD-202, Method 208 guaranteed
- ✧ Polarity: Color band denotes cathode
- ✧ High temperature soldering guaranteed: 260°C /10 seconds/.375", (9.5mm) lead lengths at 5 lbs., (2.3kg) tension
- ✧ Weight: 1.65 grams



Dimensions in inches and (millimeters)

Marking Diagram



- 6AXXG = Specific Device Code
- G = Green Compound
- Y = Year
- WW = Work Week

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Type Number	Symbol	6A 05G	6A 10G	6A 20G	6A 40G	6A 60G	6A 80G	6A 100G	Units
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T _A = 50 °C	I _{F(AV)}	6.0							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	250							A
Maximum Instantaneous Forward Voltage @6.0A	V _F	1.1	1.0						V
Maximum DC Reverse Current at @ T _A =25 °C Rated DC Blocking Voltage (Note 1) @ T _A =125 °C	I _R	10 100							uA uA
Typical Junction Capacitance (Note 3)	C _j	60							pF
Typical Thermal Resistance (Note 2)	R _{θJA}	35							°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	- 65 to + 150							°C

- Notes: 1. Pulse Test with PW=300 usec, 1% Duty Cycle
2. Mount on Cu-Pad Size 16mm x 16mm on P.C.B.
3. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.

RATINGS AND CHARACTERISTIC CURVES (6A05G THRU 6A100G)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

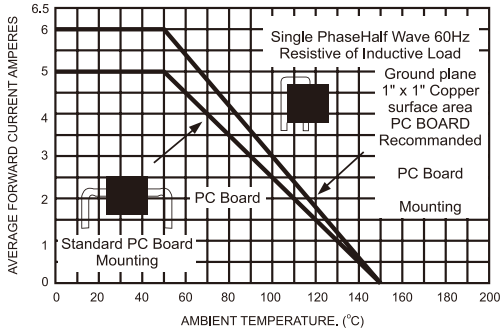


FIG.2- TYPICAL REVERSE CHARACTERISTICS PER LEG

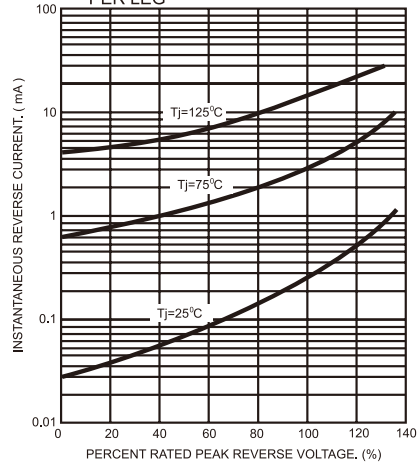


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

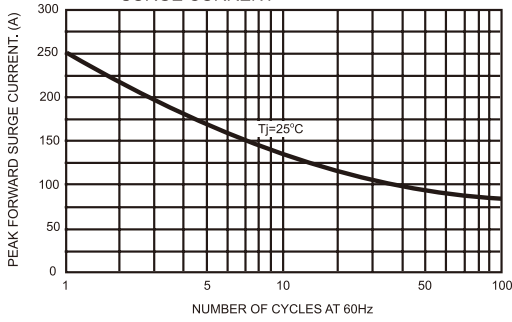


FIG.4- TYPICAL JUNCTION CAPACITANCE

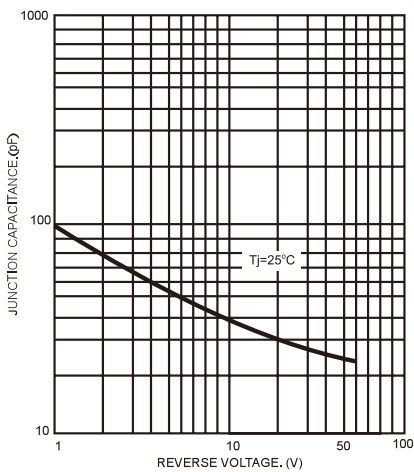


FIG.5- TYPICAL FORWARD CHARACTERISTICS

