

6A05G THRU 6A10G

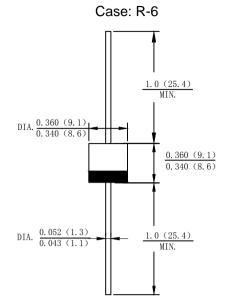
6.0 AMPS. Glass Passivated Rectifiers

Features

- · Low forward voltage drop
- · High current capability
- · High reliability
- · High surge current capability
- · Plastic material-UL flammability 94V-0

Mechanical Data

- · Case: Molded plastic R-6
- Terminals: Plated leads solderable per MIL-STD-202, Method 208 guaranteed
- · Polarity: Color band dentes cathode end
- Mounting Position: Any
- · Making: Type Number
- Lead Free: For RoHS/Lead Free Version



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	6A05G	6A1G	6A2G	6A4G	6A6G	6A8G	6A10G	Unit
Maximum Recurrent Peak Reverse Voltage	V _{RM}	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
Average Rectified Output Current (Note 1) @T _L =100°C	IF(AV)	6.0							Α
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	İfsm	200							А
I ² t Rating for Fusing (t < 8.3ms)	l ² t	166							A ² s
Forward Voltage @IF=6.0A	V _{FM}	1.1							V
Peak Reverse Current @T _A =25°C	ls.		5.0						
At Rated DC Blocking Voltage @T _A =125°C	· I _R	100							uA
Typical Junction Capacitance (Note 2)	Сл	90							pF
Typical Thermal Resistance Junction to Ambient	RвJA	35							°C/W
Operating Temperature Range	Тл	-55 to +150							$^{\circ}\!\mathbb{C}$
Storage Temperature Range	Тѕтс	-55 to +150							$^{\circ}\!\mathbb{C}$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

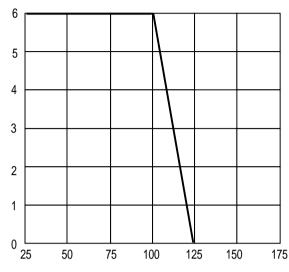
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Average Forward Current (A)

IFSM, Peak Forward Surge Current (A)

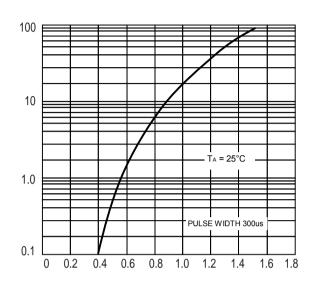
Fig. 1 Forward Current Derating Curve



T_L Lead Temperature(°C)

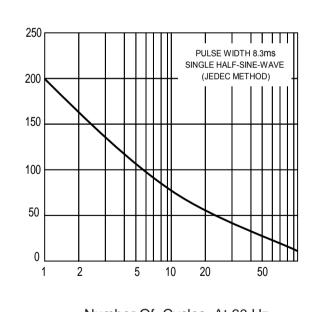
Fig. 2 Instantaneous Forward Characteristics

Instantaneous Forward Current (A)



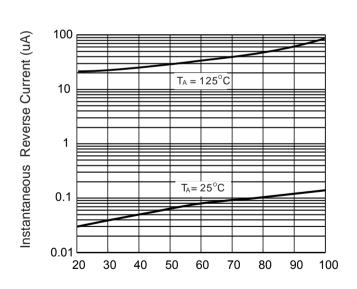
V_F, Instantaneous Forward Voltage (V)

Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



Number Of Cycles At 60 Hz

Fig.4 Typical Reverse Chracteristics



Percent Of Rated Peak Reverse Voltage (%)

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