

**31GF6A**

**ULTRAFAST EFFICIENT  
GLASS PASSIVATED RECTIFIER**  
**VOLTAGE: 600V CURRENT: 3.0A**



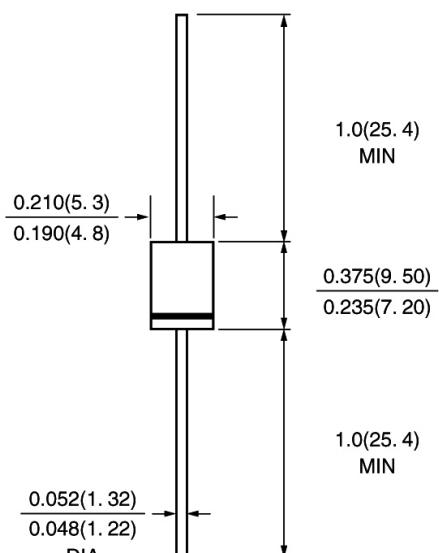
## FEATURE

Low power loss  
High surge capability  
Ultra-fast recovery time for high efficiency  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension

## MECHANICAL DATA

Terminal: Plated axial leads solderable per  
MIL-STD 750, method 2026  
Case: Molded with UL-94 Class V-0 recognized Flame  
Retardant Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

**DO-201AD**



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half-wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

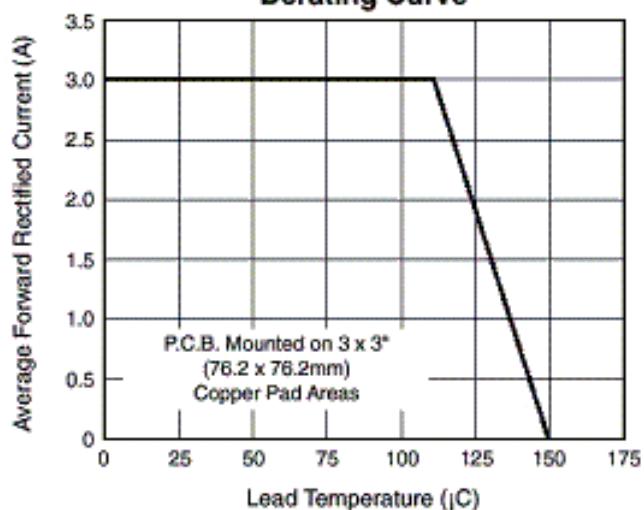
	SYMBOL	31GF6A	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified Current, 0.375" lead length at TL =110°C	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	125	A
Maximum Forward Voltage at Forward current At3.0A (Note 1)	Vf	1.6	V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =120°C	Ir	10.0 100.0	µ A µ A
Maximum Reverse Recovery Time (Note 2)	Trr	30	nS
Typical Thermal Resistance	R(ja)	30.0	°C/W
Storage and Operating Junction Temperature	Tstg,Tj	-40 to +150	°C

Note:

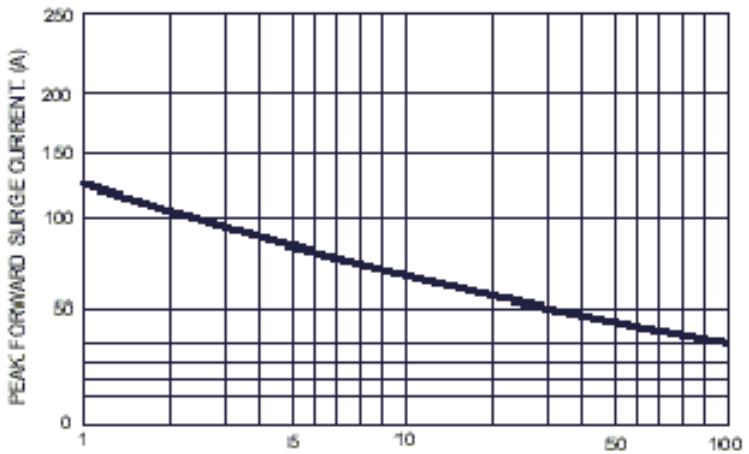
1. Pulse test:300uS pulse width, 1% duty cycle
2. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A

## RATINGS AND CHARACTERISTIC CURVES 31GF6A

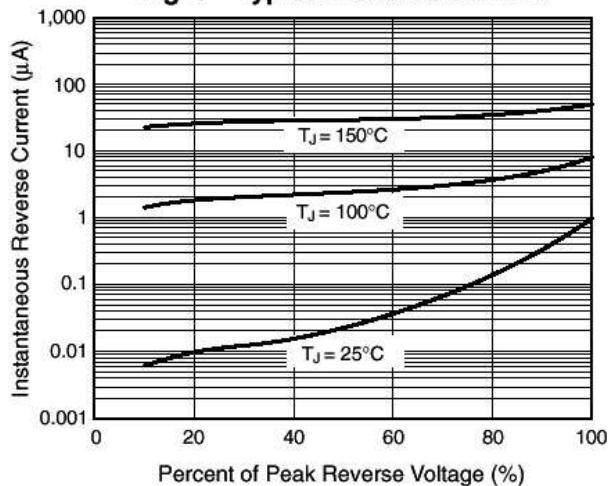
**Fig. 1 – Maximum Forward Current Derating Curve**



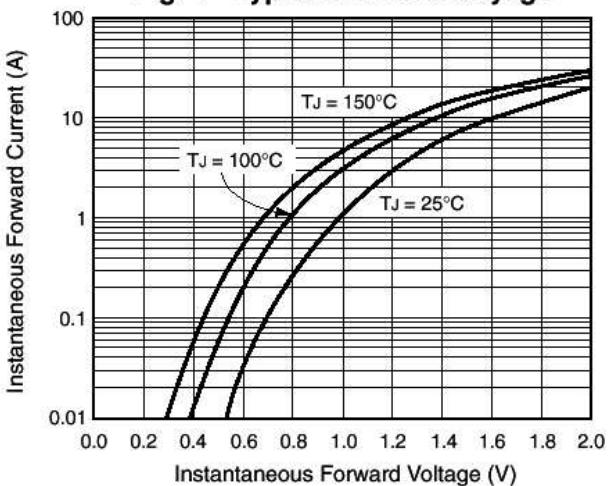
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Reverse Current**



**Fig. 4 – Typical Forward Volage**



**Fig. 5 – Typical Junction Capacitance**

