

31GF6

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

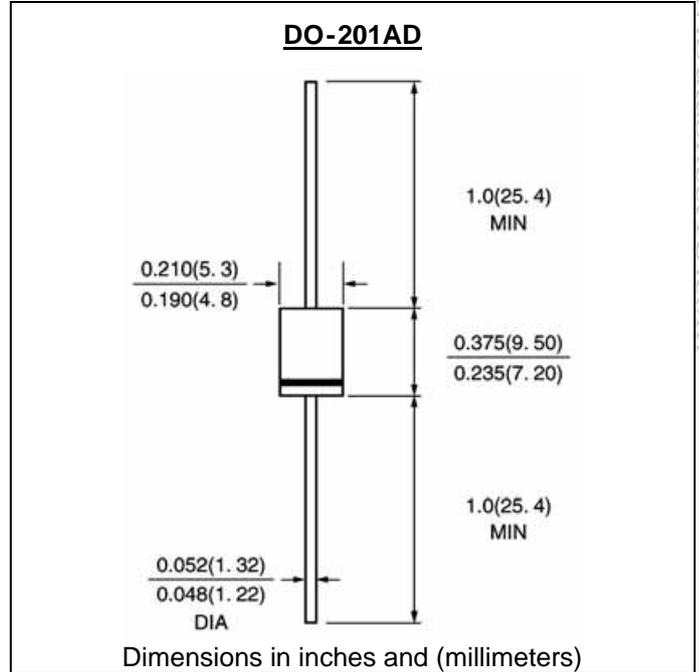


FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250 /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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| | SYMBOL | 31GF6 | units |
|---|---------------------|---------------|------------|
| Maximum Recurrent Peak Reverse Voltage | V _{rrm} | 600 | V |
| Maximum RMS Voltage | V _{rms} | 420 | V |
| Maximum DC blocking Voltage | V _{dc} | 600 | V |
| Maximum Average Forward Rectified Current, 0.375 lead length at TL =110 | I _{f(av)} | 3.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I _{fsm} | 90 | A |
| Maximum Forward Voltage at Forward current At3.0A (Note 1) | V _f | 1.6 | V |
| Maximum DC Reverse Current Ta =25 at rated DC blocking voltage Ta =120 | I _r | 10.0 100.0 | μ A μ A |
| Maximum Reverse Recovery Time (Note 2) | T _{rr} | 30 | nS |
| Typical Thermal Resistance | R(ja) | 30.0 | /W |
| Storage and Operating Junction Temperature | T _{stg,Tj} | -40 to +150 | |

Note :
1. Pulse test:300uS pulse width, 1% duty cycle
2. Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A

Fig. 1 – Maximum Forward Current Derating Curve

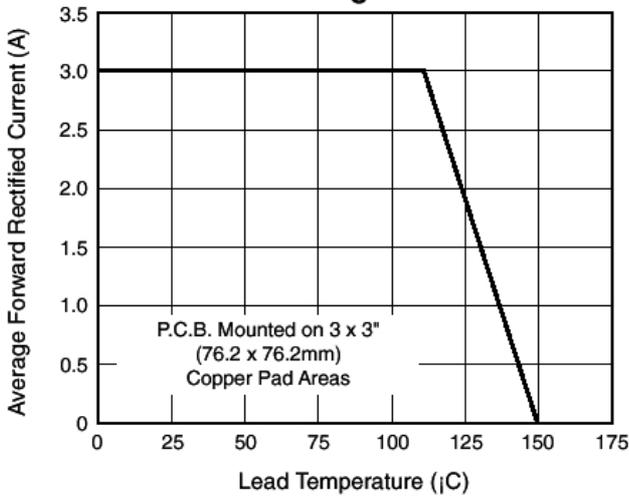


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

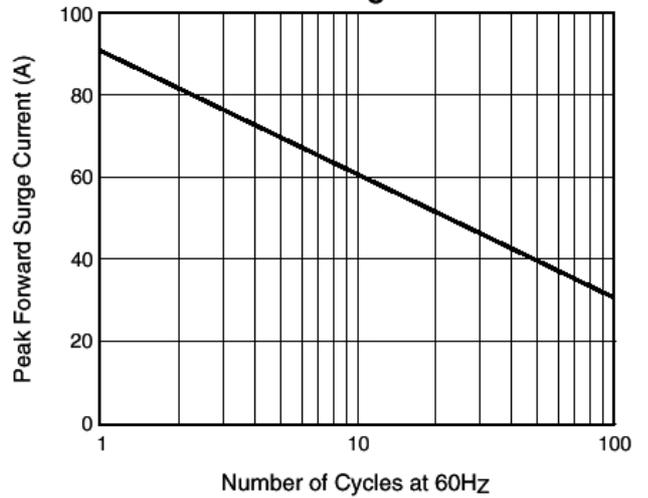


Fig. 3 – Typical Reverse Current

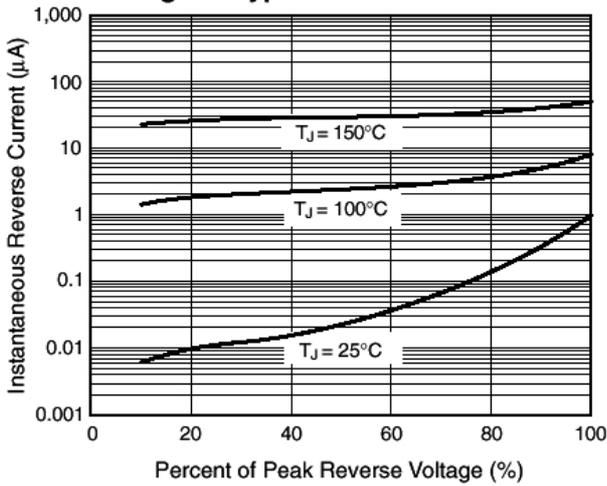


Fig. 4 – Typical Forward Voltyage

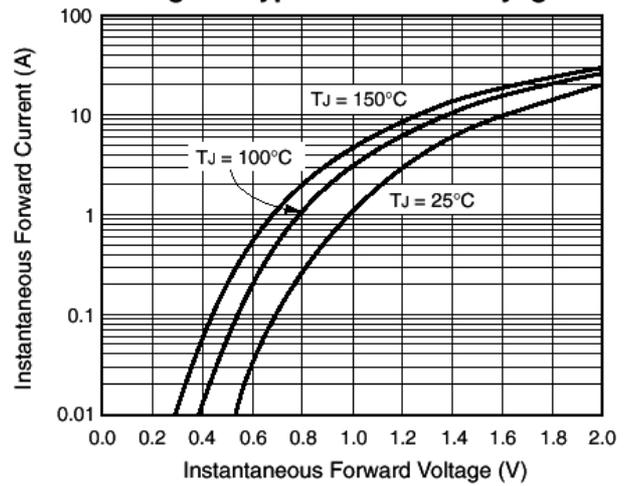


Fig. 5 – Typical Junction Capacitance

