

31GF6

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

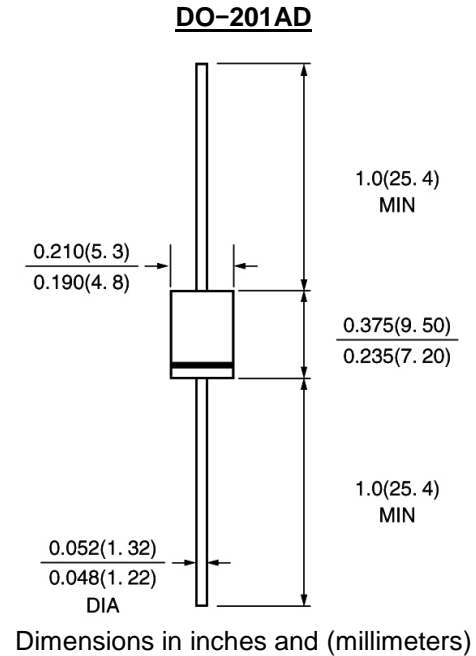


FEATURE

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, 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°C	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°C at rated DC blocking voltage Ta =120°C	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	°C/W
Storage and Operating Junction Temperature	T _{stg,Tj}	-40 to +150	°C

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

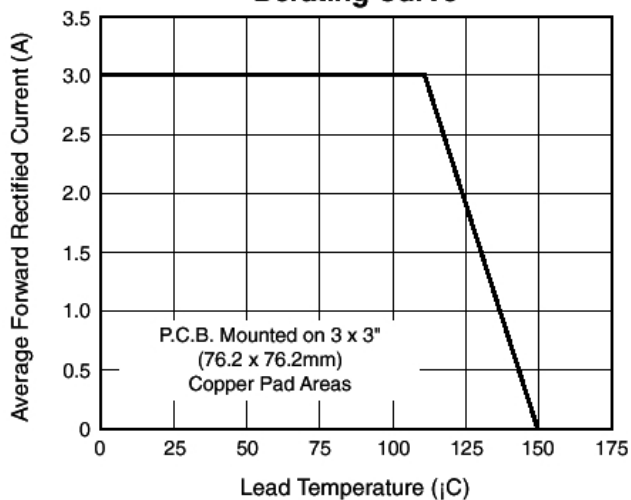


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

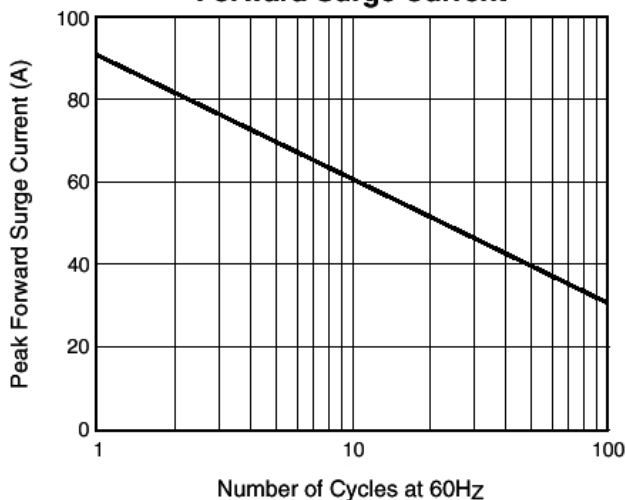


Fig. 3 – Typical Reverse Current

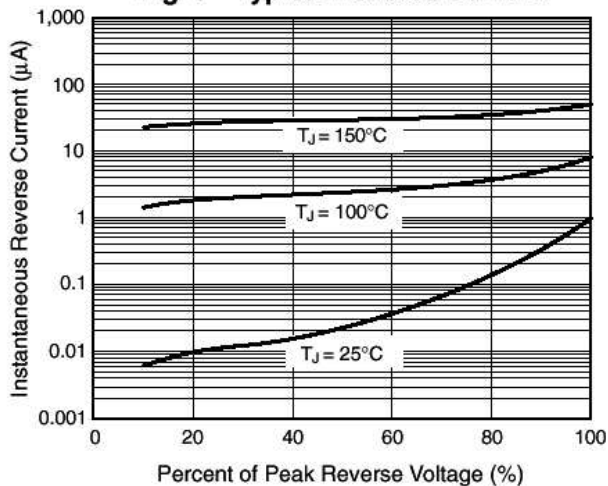


Fig. 4 – Typical Forward Voltyage

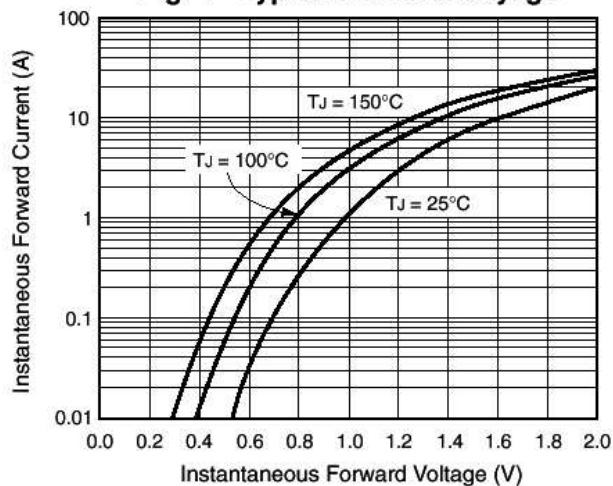


Fig. 5 – Typical Junction Capacitance

