

# 31GF4

**ULTRAFAST EFFICIENT  
GLASS PASSIVATED RECTIFIER**  
VOLTAGE : 400V      CURRENT : 3.0A

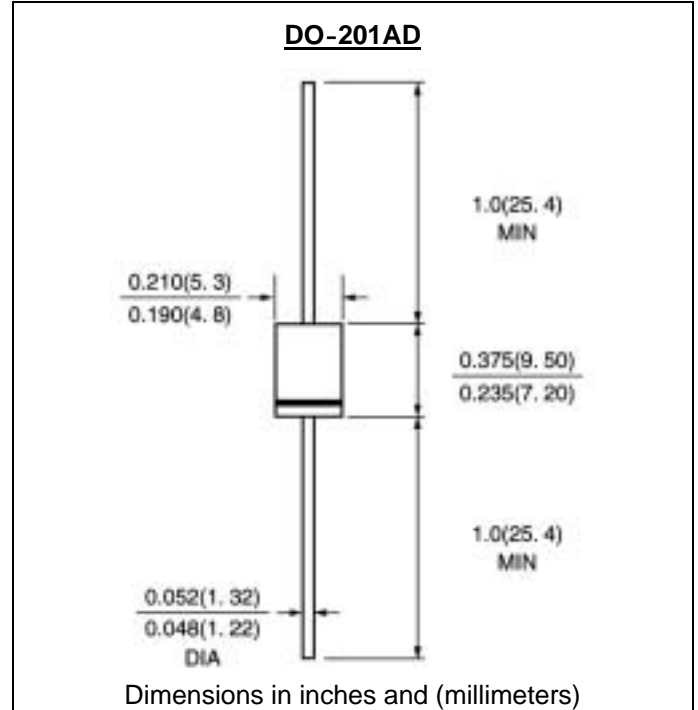


## FEATURE

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

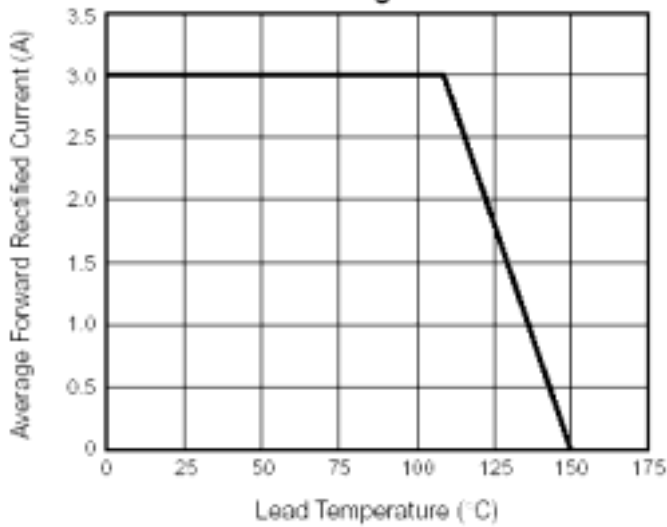
(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25 , unless otherwise stated)

	SYMBOL	31GF4	units
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	400	V
Maximum RMS Voltage	V <sub>rms</sub>	280	V
Maximum DC blocking Voltage	V <sub>dc</sub>	400	V
Maximum Average Forward Rectified Current, 0.375 lead length at TL =110	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	80	A
Maximum Forward Voltage at Forward current At3.0A (Note 1)	V <sub>f</sub>	1.25	V
Maximum DC Reverse Current Ta =25 at rated DC blocking voltage Ta =120	I <sub>r</sub>	20.0 200.0	μ A μ A
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	30	nS
Typical Thermal Resistance	R(ja)	80.0	/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-40 to +150	

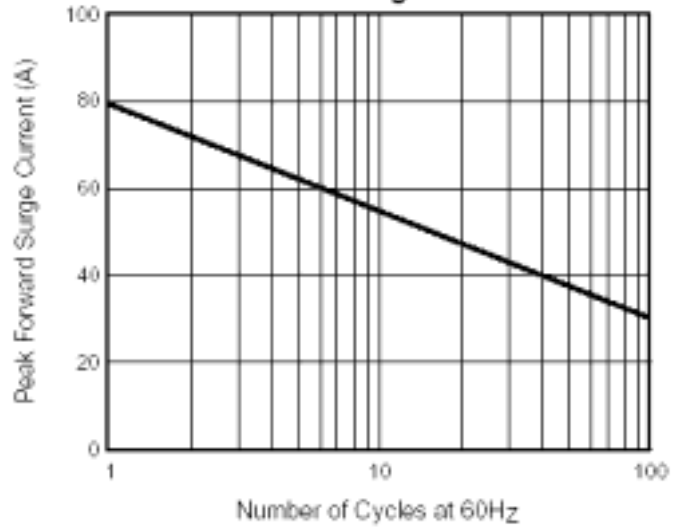
Note :

1. Pulse test:300uS pulse width, 1% duty cycle
2. Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A

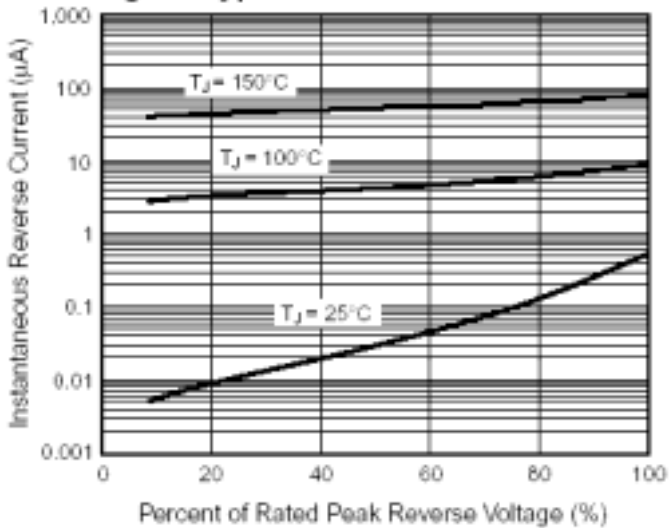
**Fig. 1 – Maximum Forward Current Derating Curve**



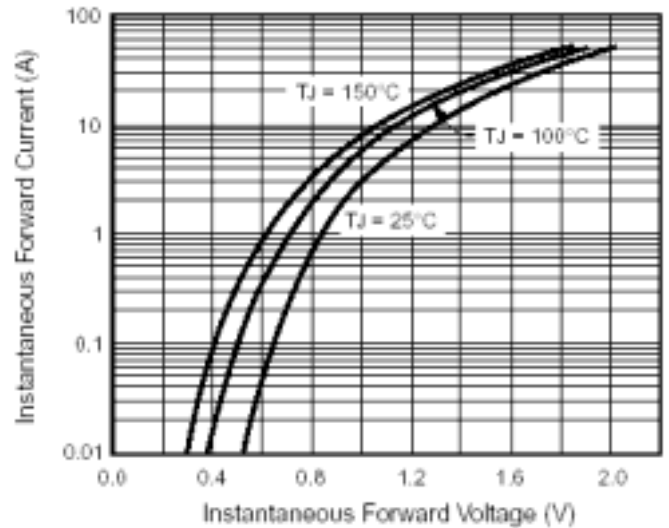
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Reverse Characteristics**



**Fig. 4 – Typical Instantaneous Forward Characteristics**



**Fig. 5 – Typical Junction Capacitance**

