

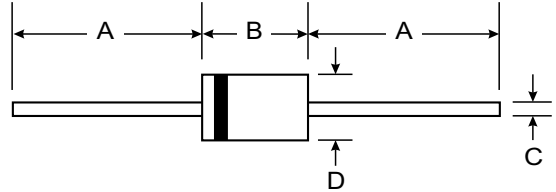
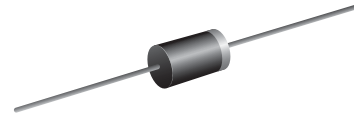
**VOLTAGE RANGE: 600V**  
**CURRENT: 3.0 A**

### Features

- High current capability
- High surge current capability
- High reliability
- Low reverse current
- Low forward voltage drop
- Super fast recovery time

### Mechanical Data

- Case : DO-201AD Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 1.21 grams



DO-201AD		
Dim	Min	Max
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

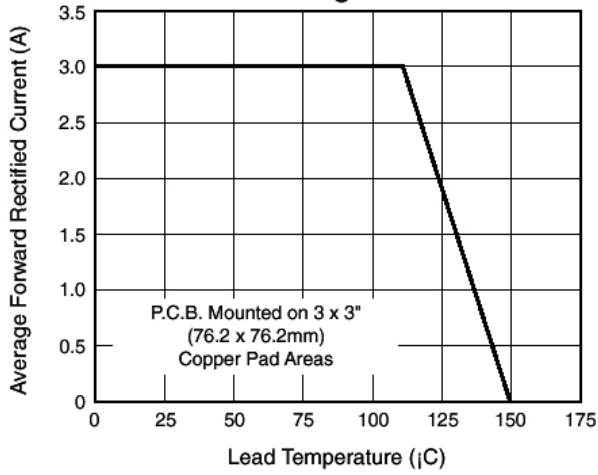
Characteristic	Symbol	31GF6	Unit
Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	600	V
Maximum RMS Voltage	V <sub>rms</sub>	420	V
Maximum DC blocking Voltage	V <sub>dc</sub>	600	V
Maximum Average Forward Rectified Current, 0.375" lead length at T <sub>L</sub> = 110°C	I <sub>f(av)</sub>	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>fsm</sub>	90	A
Maximum Forward Voltage at Forward current At 3.0A (Note 1)	V <sub>f</sub>	1.6	V
Maximum DC Reverse Current T <sub>a</sub> = 25°C at rated DC blocking voltage T <sub>a</sub> = 120°C	I <sub>r</sub>	10.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	30	nS
Typical Thermal Resistance	R(ja)	30.0	°C/W
Storage and Operating Junction Temperature	T <sub>stg</sub> , T <sub>j</sub>	-40 to +150	°C

Note:

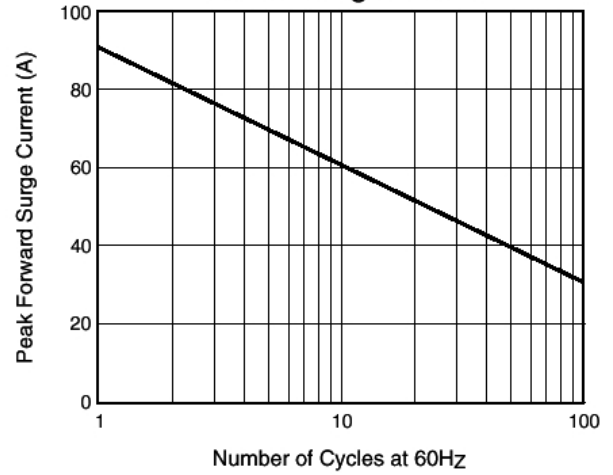
1. Pulse test: 300μs pulse width, 1% duty cycle
2. Reverse Recovery Condition I<sub>f</sub> = 0.5A, I<sub>r</sub> = 1.0A, I<sub>rr</sub> = 0.25A

### RATINGS AND CHARACTERISTIC CURVES 31GF6

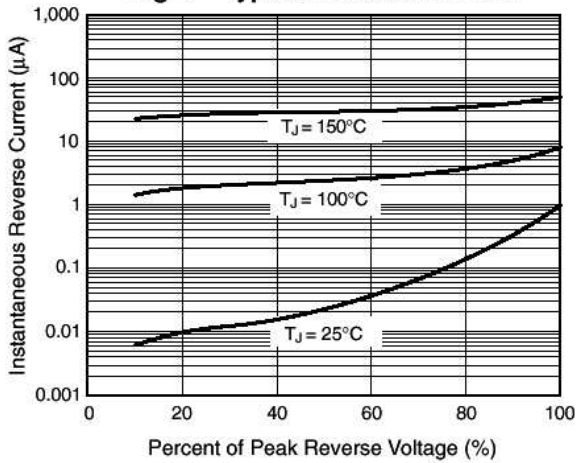
**Fig. 1 – Maximum Forward Current Derating Curve**



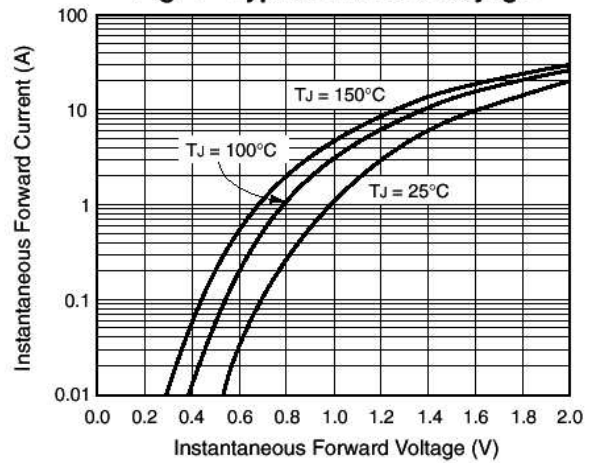
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Reverse Current**



**Fig. 4 – Typical Forward Voltyage**



**Fig. 5 – Typical Junction Capacitance**

