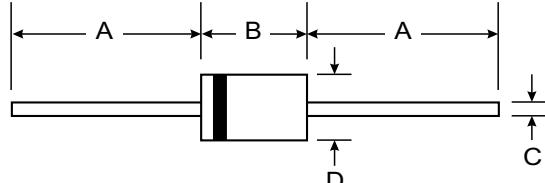


**VOLTAGE RANGE: 600V**
**CURRENT: 3.0 A**
**Features**

- 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**  $T_A = 25^\circ\text{C}$  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 $T_L = 110^\circ\text{C}$	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 At3.0A (Note 1)	V <sub>f</sub>	1.6		V
Maximum DC Reverse Current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 120^\circ\text{C}$	I <sub>r</sub>	10.0 100.0	$\mu\text{A}$ $\mu\text{A}$	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 2)	T <sub>rr</sub>	30		nS
Typical Thermal Resistance	R(ja)	30.0		$^\circ\text{C/W}$
Storage and Operating Junction Temperature	T <sub>stg,Tj</sub>	-40 to +150		$^\circ\text{C}$

Note:

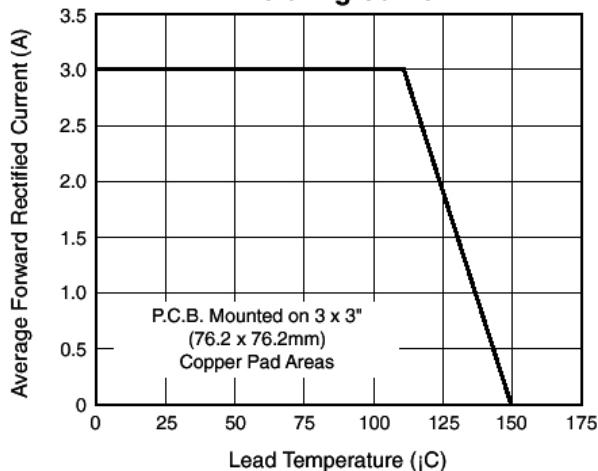
1. Pulse test: 300μS pulse width, 1% duty cycle
2. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A



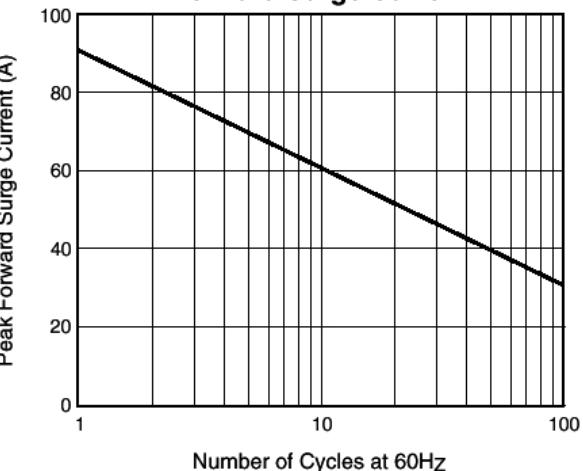
SUNMATE

## RATINGS AND CHARACTERISTIC CURVES 31GF6

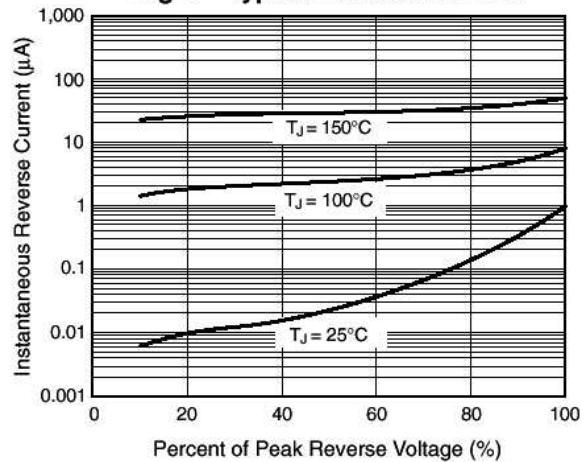
**Fig. 1 – Maximum Forward Current Derating Curve**



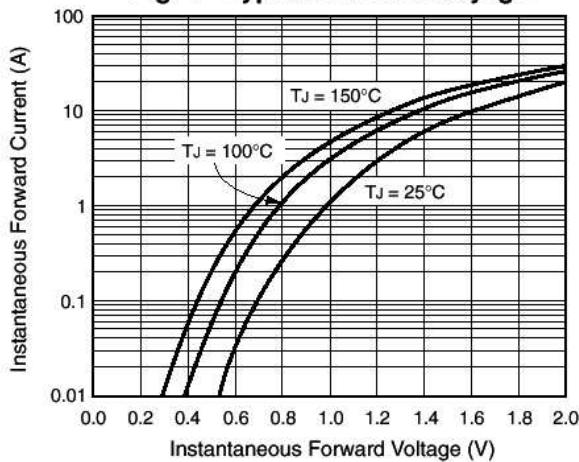
**Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 – Typical Reverse Current**



**Fig. 4 – Typical Forward Volage**



**Fig. 5 – Typical Junction Capacitance**

