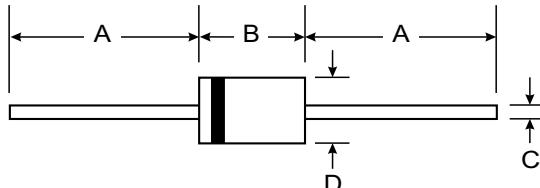


VOLTAGE RANGE: 600V
CURRENT: 3.0 A
Features

- 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 _{rmm}	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 $T_L = 110^\circ\text{C}$	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 At 3.0A (Note 1)	V _f	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 _r	10.0 100.0	μA μA	μA μA
Maximum Reverse Recovery Time (Note 2)	T _{rr}	30	—	nS
Typical Thermal Resistance	R(ja)	30.0	—	$^\circ\text{C}/\text{W}$
Storage and Operating Junction Temperature	T _{stg,Tj}	-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

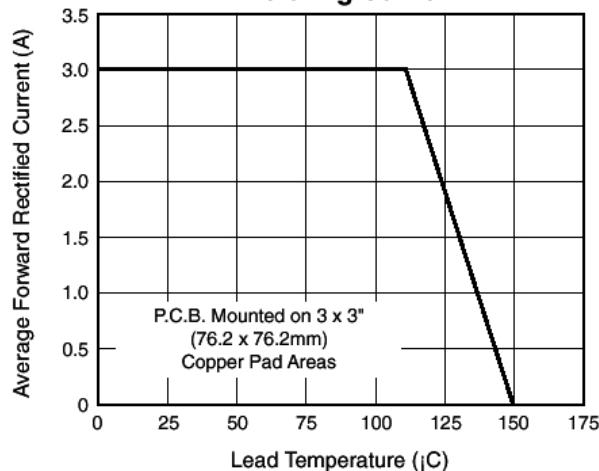


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

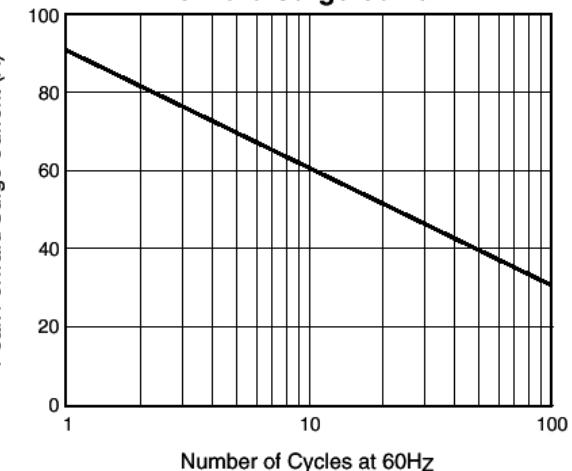


Fig. 3 – Typical Reverse Current

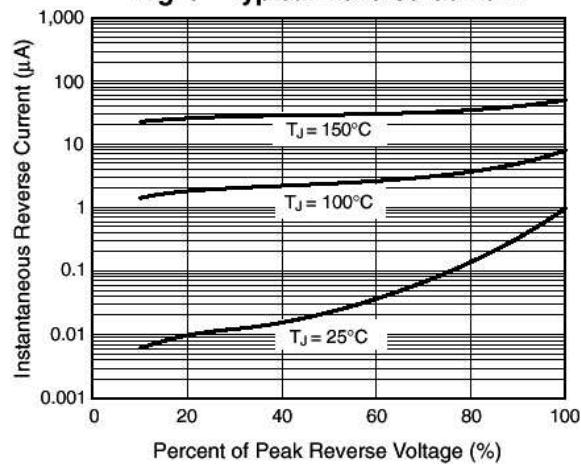


Fig. 4 – Typical Forward Volage

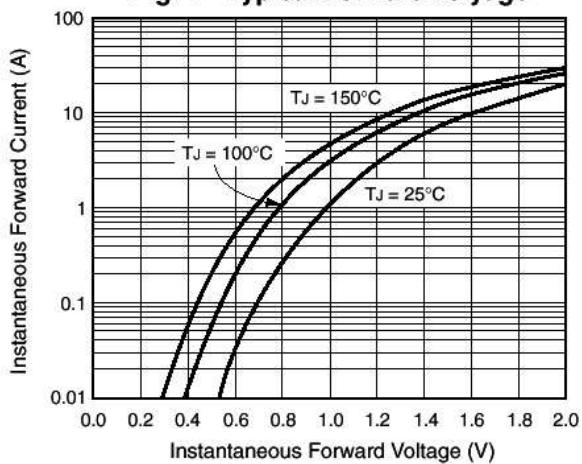


Fig. 5 – Typical Junction Capacitance

