31GF6

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE：600V CURRENT： 3.0A

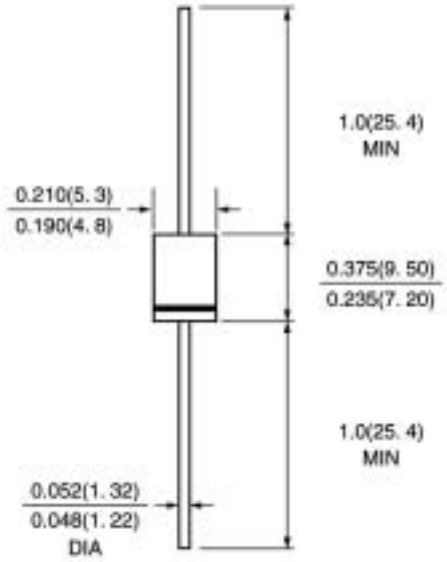
FEATURE

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

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	31GF6	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	V
Maximum RMS Voltage	Vrms	420	V
Maximum DC blocking Voltage	Vdc	600	V
Maximum Average Forward Rectified Current, 0.375 ″ lead length at TL =110℃	If(av)	3.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	90	A
Maximum Forward Voltage at Forward current At3.0A (Note 1)	Vf	1.6	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =120℃	Ir	10.0 100.0	μA μA
Maximum Reverse Recovery Time (Note 2)	Trr	30	nS
Typical Thermal Resistance	R(ja)	30.0	℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-40 to +150	℃

Note：

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

RATINGS AND CHARACTERISTIC CURVES 31GF6

[1]

Fig. 1 – Maximum Forward Current Derating Curve

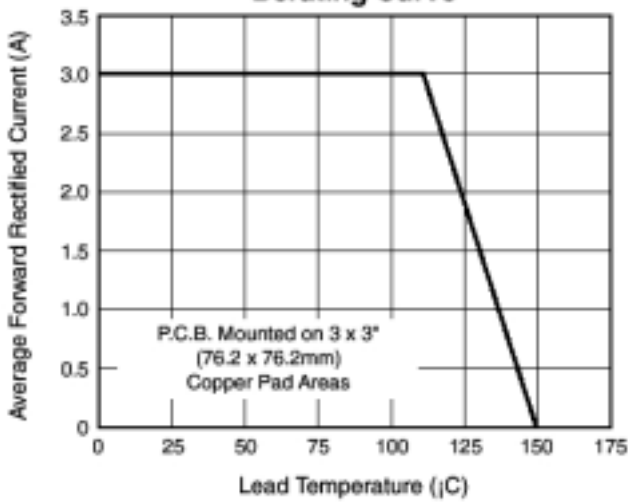


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

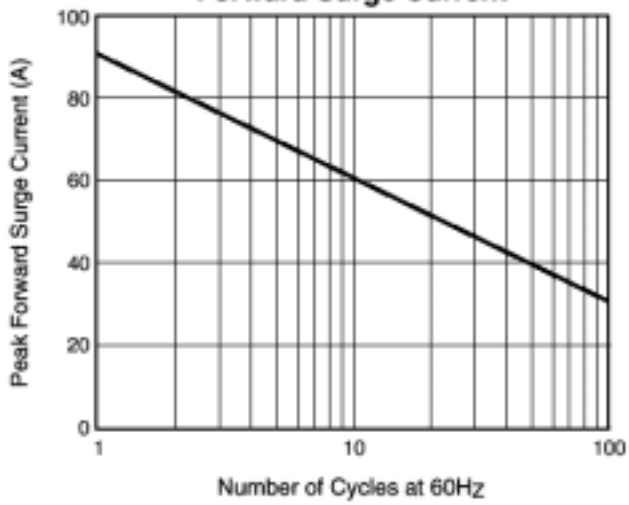


Fig. 3 – Typical Reverse Current

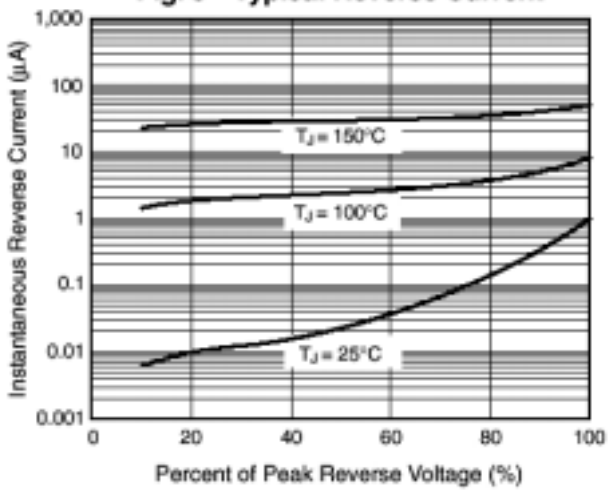


Fig. 4 – Typical Forward Volyage

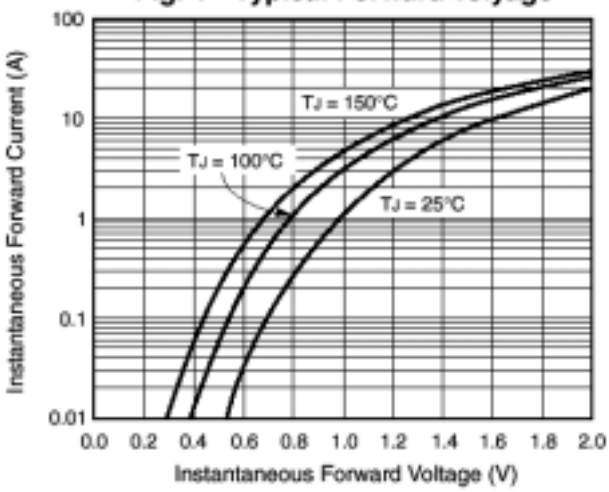
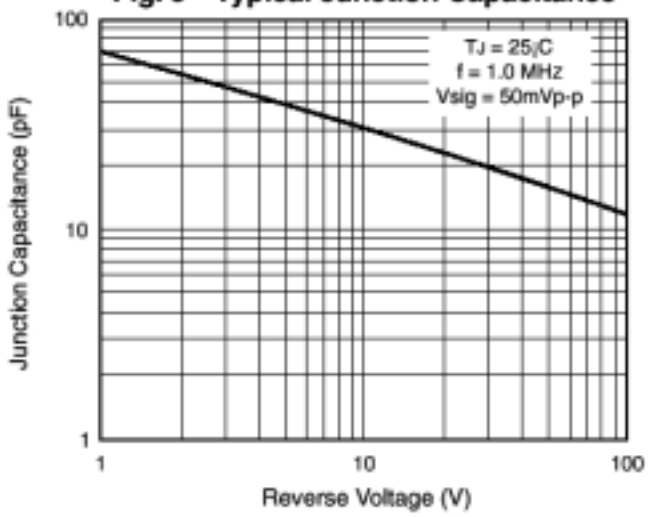


Fig. 5 – Typical Junction Capacitance



[1] Rev.A4, 1-Jul-03