



YENYO

31GF4 THRU 31GF6

Glass Passivated Efficient Fast Recovery Rectifier

Features

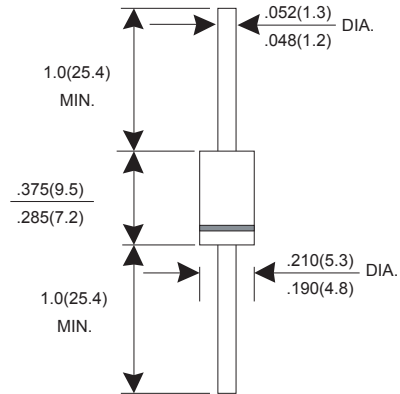
- * Fast switching for high efficiency
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic DO-201AD
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202 method 208a
- * Polarity: Color band denotes cathode
- * Mounting position: Any
- * Weight: 1.1 grams

**Voltage Range 400 to 600 V
Current 3.0 Ampere**

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMTER	SYMBOL	31GF4	31GF6	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	400	600	V
Maximum RMS Voltage	VRMS	280	480	V
Maximum DC Blocking Voltage	VDC	400	600	V
Maximum Average Forward Rectified Current $T_L=55^\circ\text{C}$	IF(AV)	3.0		A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	IFSM	125		A
Maximum Instantaneous Forward Voltage @ 3.0 A	VF	1.25	1.6	V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$	IR	5.0 150		uA uA
Maximum Reverse Recovery Time (Note 1)	Trr	30		nS
Typical junction Capacitance (Note 2)	CJ	60		pF
Maximum Thermal Resistance (Note 3)	RθJA	50		°CW
Operating Junction and Storage Temperature Range	TJ, TSTG	-55 to +150		°C

NOTES : (1) Reverse recovery test conditions $I_F = 0.5A$, $I_R = 1.0A$, $I_{rr} = 0.25A$.
(2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.
(3) Thermal Resistance junction to lead.

RATINGS AND CHARACTERISTIC CURVES 31GF4 THRU 31GF6

FIG.1 - FORWARD CURRENT DERATING CURVE

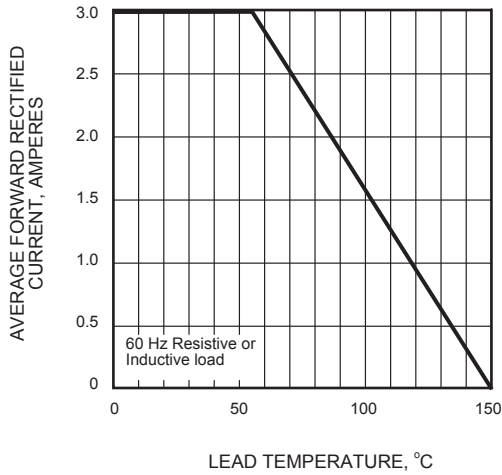


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

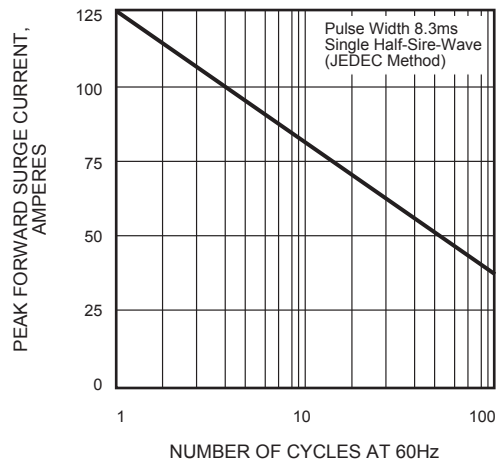


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

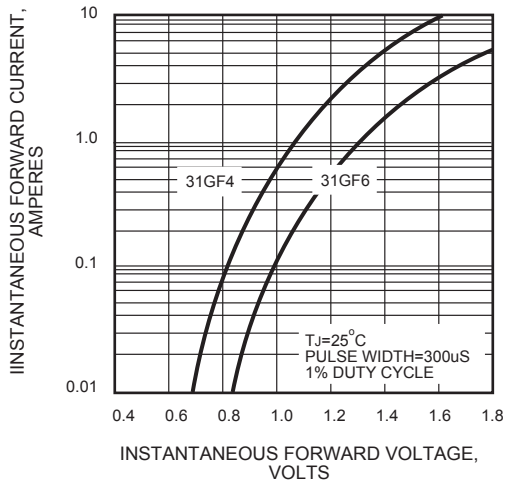


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

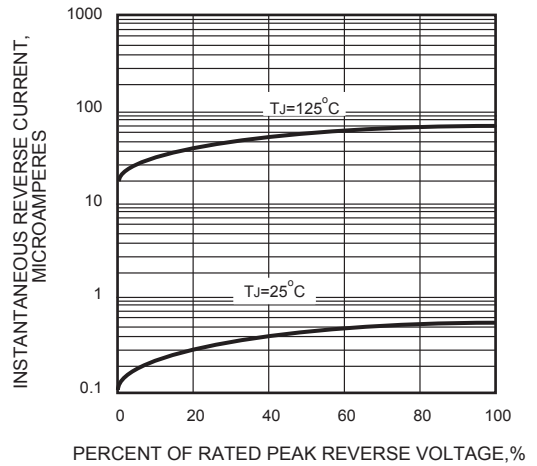


FIG.5 - TYPICAL JUNCTION CAPACITANCE

