

UG3A THRU UG3D

**ULTRAFAST EFFICIENT
GLASS PASSIVATED RECTIFIER**
VOLTAGE: 50 TO 200V CURRENT: 3.0A

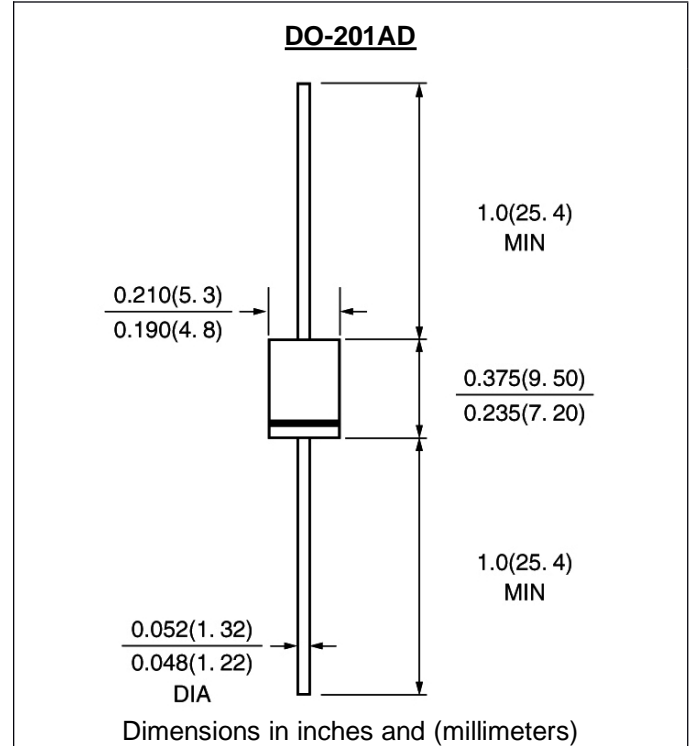


FEATURE

Low power loss
High surge capability
Glass passivated chip junction
Ultra-fast recovery time for high efficiency
High temperature soldering guaranteed
250°C/10sec/0.375" lead length at 5 lbs tension

MECHANICAL DATA

Terminal: Plated axial leads solderable per MIL-STD 202E, method 208C
Case: Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity: color band denotes cathode
Mounting position: any



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UG3A	UG3B	UG3C	UG3D	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	150	200	V
Maximum RMS Voltage	V _{rms}	35	70	105	140	V
Maximum DC blocking Voltage	V _{dc}	50	100	150	200	V
Maximum Average Forward Rectified Current 3/8" lead length at Ta =50°C	I _{f(av)}	3.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	125.0				A
Maximum Forward Voltage at Forward current 3.0A Peak	V _f	0.95				V
Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =100°C	I _r	5.0 250.0				μ A μ A
Maximum Reverse Recovery Time (Note 1)	T _{rr}	20				nS
Typical Junction Capacitance (Note 2)	C _j	26				pF
Typical Thermal Resistance (Note 3)	R(ja)	25				°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-55 to +150				°C

Note:

- Reverse Recovery Condition I_f =0.5A, I_r =1.0A, I_{rr} =0.25A
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient at 3/8" lead length, P.C. Board Mounted

Fig. 1 – Forward Current Derating Curves

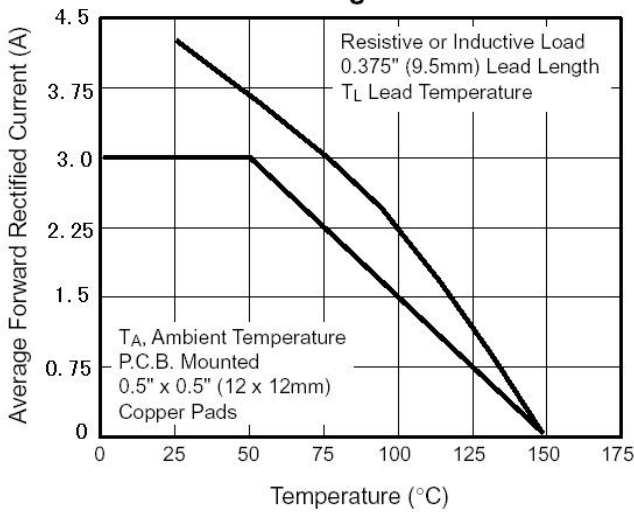


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

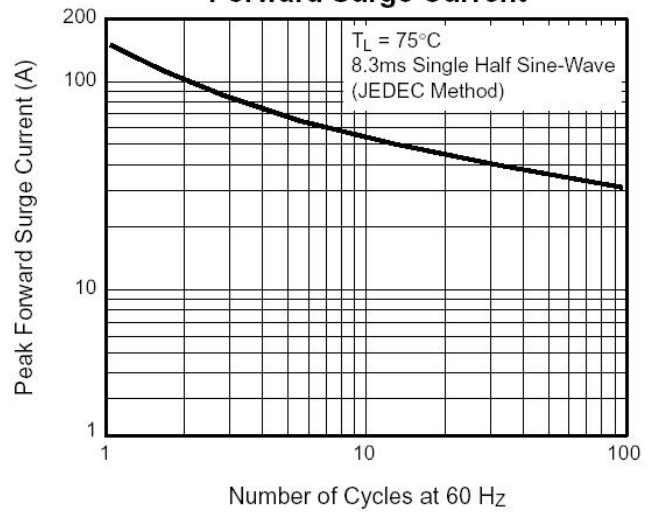


Fig. 3 – Typical Instantaneous Forward Characteristics

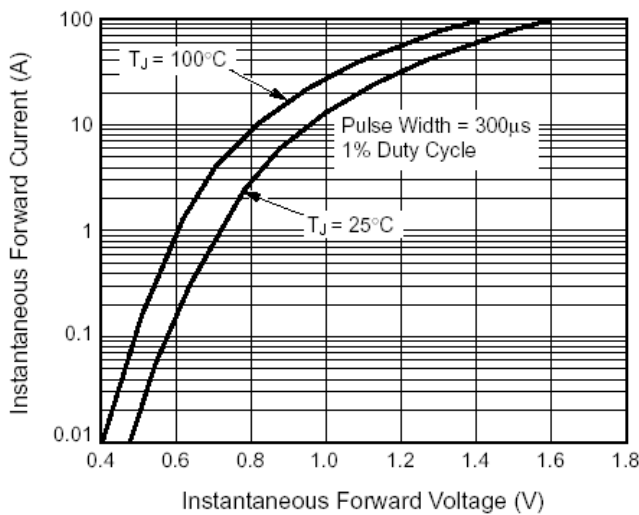


Fig. 4 – Typical Reverse Leakage Characteristics

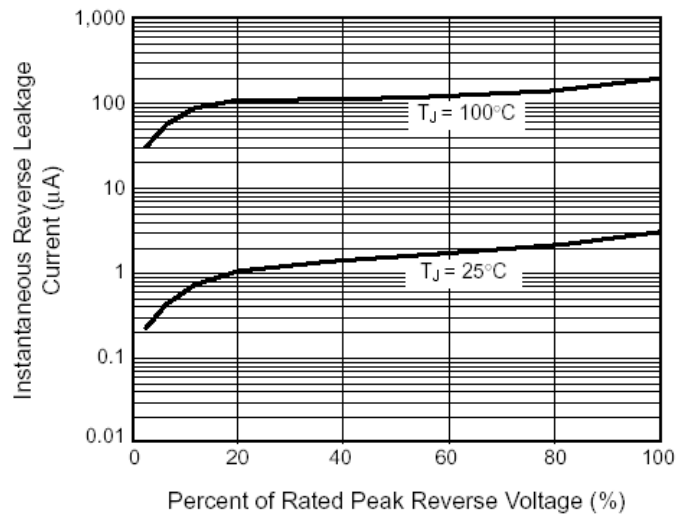


Fig. 5 – Reverse Switching Characteristics

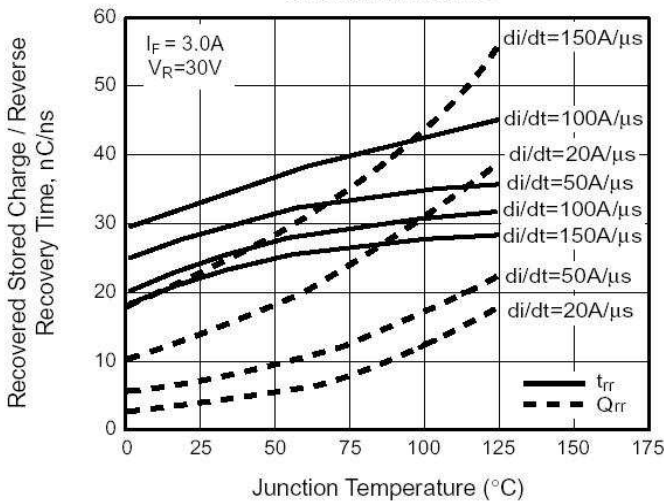


Fig. 6 – Typical Junction Capacitance

