UG3A THRU UG3D

ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

VOLTAGE：50 TO 200V CURRENT： 3.0A

VOLTARISTECH INC.
POWER · PRECISION · INNOVATION

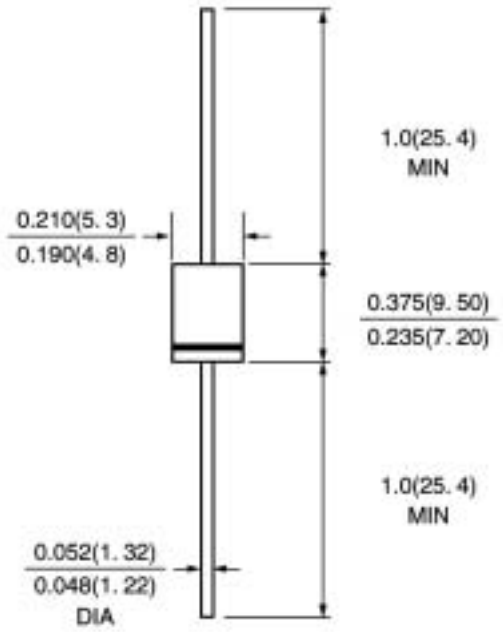
FEATURE

Low power loss
High surge capability
Glass passivated chip junction
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 202E, method 208C
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	UG3A	UG3B	UG3C	UG3D	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	150	200	V
Maximum RMS Voltage	Vrms	35	70	105	140	V
Maximum DC blocking Voltage	Vdc	50	100	150	200	V
Maximum Average Forward Rectified Current 3/8 ″ lead length at Ta =50℃	If(av)	3.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	125.0				A
Maximum Forward Voltage at Forward current 3.0A Peak	Vf	0.95				V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =100℃	Ir	5.0 250.0				μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	20				nS
Typical Junction Capacitance (Note 2)	Cj	26				pF
Typical Thermal Resistance (Note 3)	R(ja)	25				℃/W
Storage and Operating Junction Temperature	Tstg,Tj	-55 to +150				℃

Note：

1. Reverse Recovery Condition If =0.5A, Ir =1.0A, Irr =0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Thermal Resistance from Junction to Ambient at 3/8 ″ lead length, P.C. Board Mounted

Fig. 1 – Forward Current Derating Curves

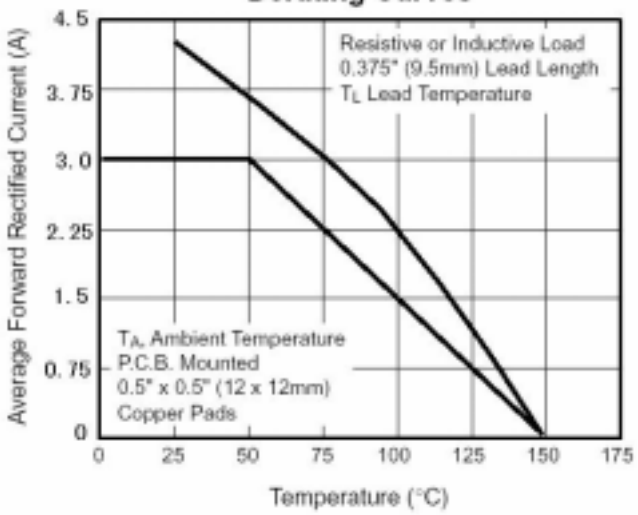


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

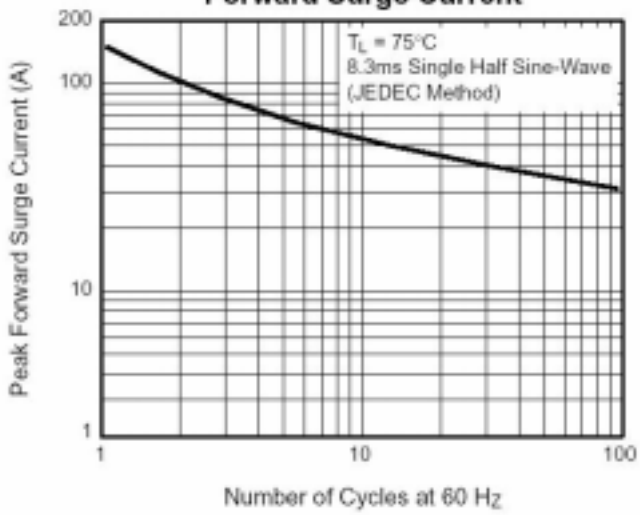


Fig. 3 – Typical Instantaneous Forward Characteristics

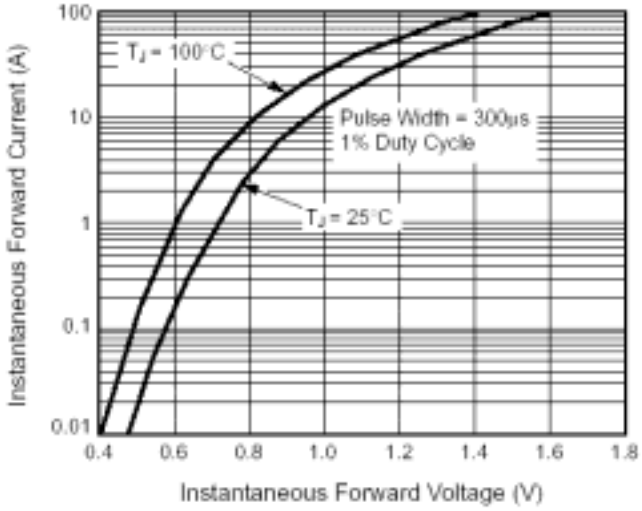


Fig. 4 – Typical Reverse Leakage Characteristics

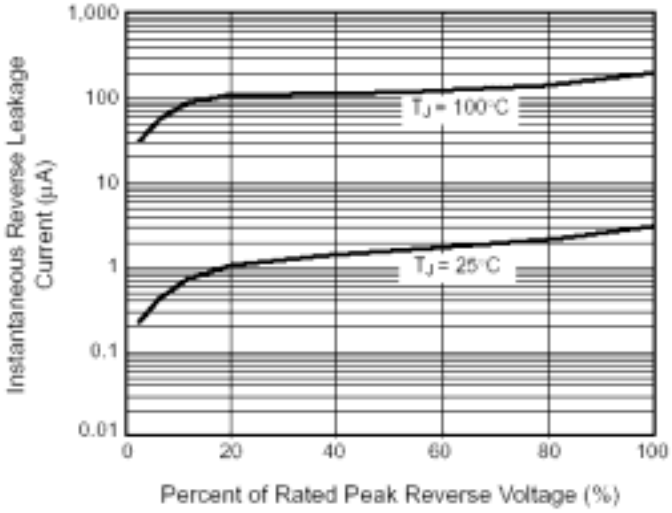


Fig. 5 – Reverse Switching Characteristics

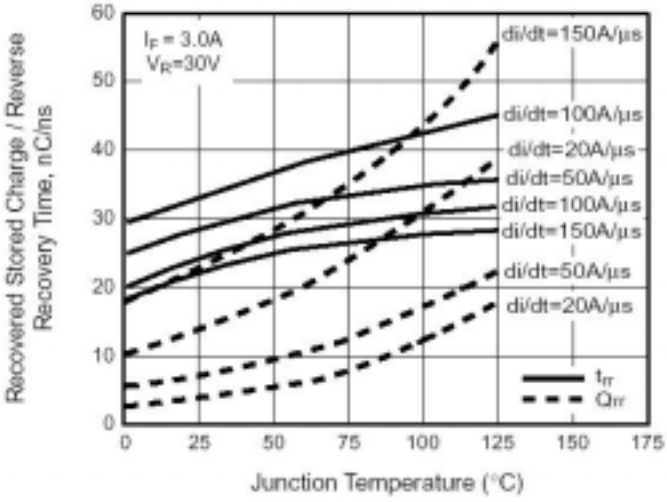
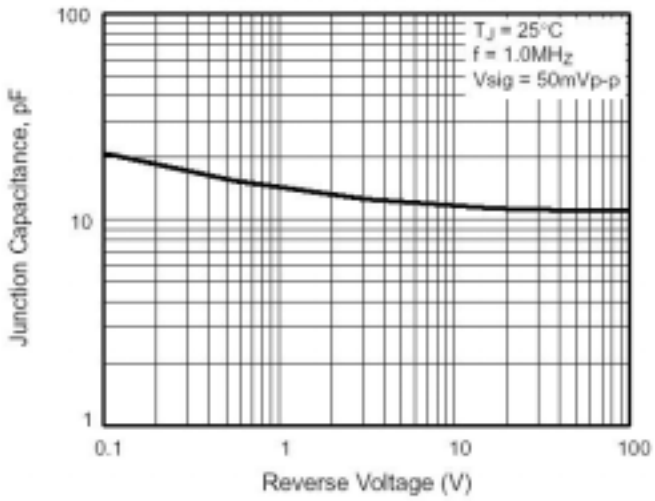


Fig. 6 – Typical Junction Capacitance



[1] Rev.A5, 1-Mar-04