UG1A THRU UG1D

ULTRAFAST EFFICIENT PLASTIC SILICON RECTIFIER

VOLTAGE：50 TO 200V CURRENT： 1.0A

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

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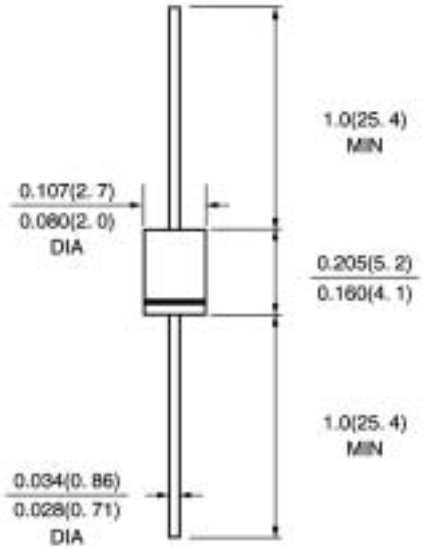

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOL	UG 1A	UG 1B	UG 1C	UG 1D	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 =75℃	If(av)	1.0				A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	40.0				A
Maximum Forward Voltage at Forward current 1A Peak	Vf	0.95				V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 200.0				μA μA
Maximum Reverse Recovery Time (Note 1)	Trr	15				nS
Typical Junction Capacitance (Note 2)	Cj	7.0				pF
Typical Thermal Resistance (Note 3)	R(ja)	60.0				℃/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

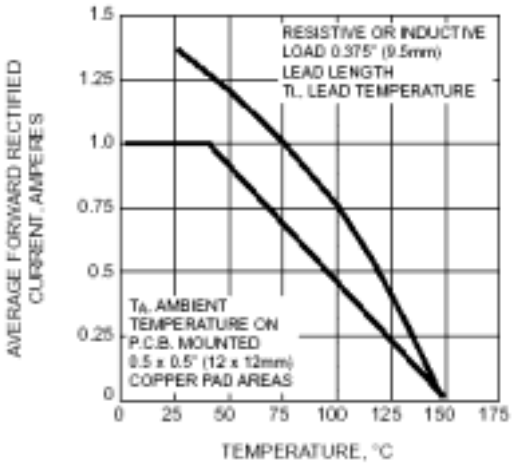

FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

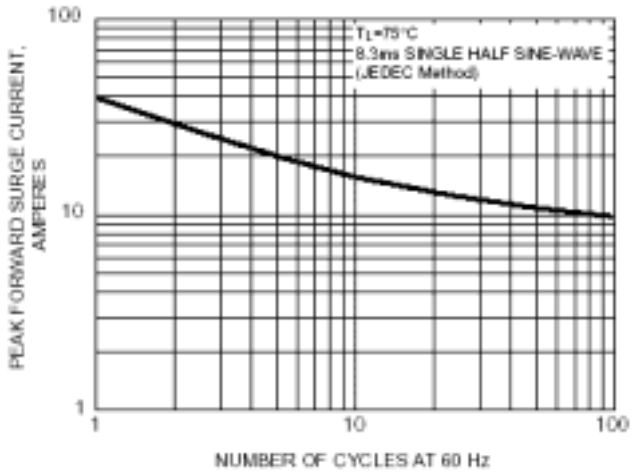

FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

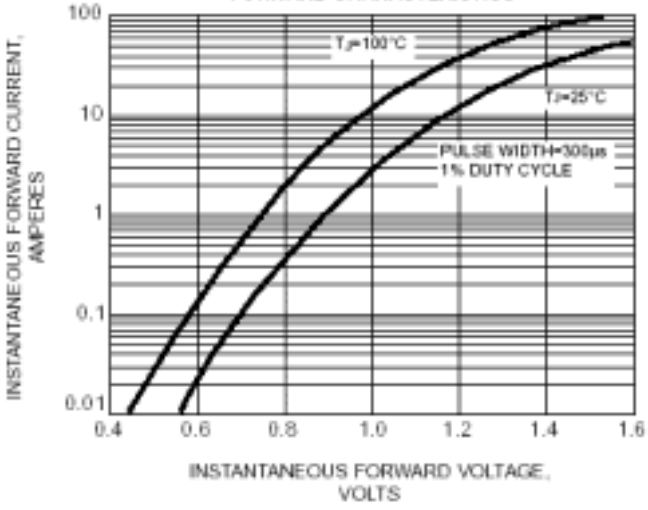

FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

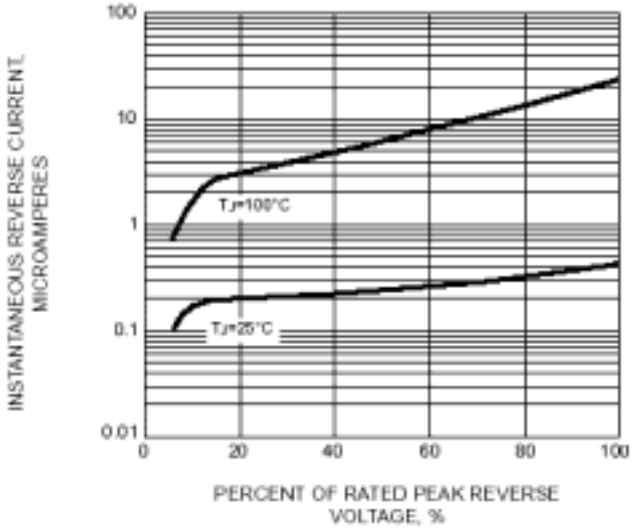

FIG. 5 - REVERSE SWITCHING CHARACTERISTICS

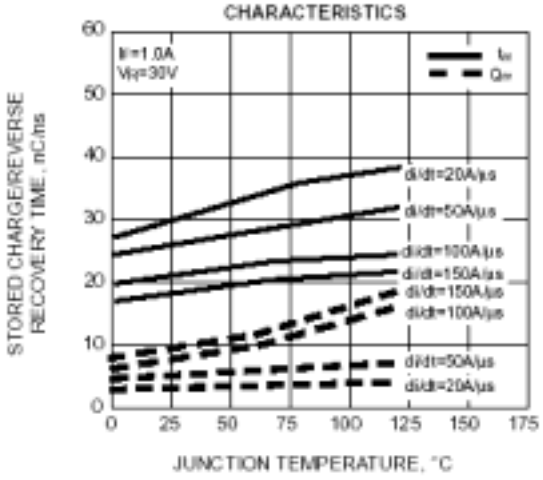

FIG. 6 - TYPICAL JUNCTION CAPACITANCE