GU1M-1

SURFACE MOUNT
SWITCHING RECTIFIER

VOLTAGE： 1000V **CURRENT： 1.0A**

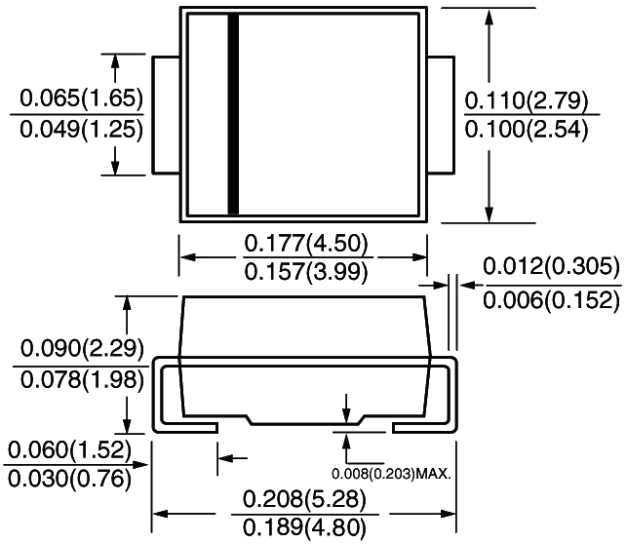
FEATURE

Ideal for surface mount pick and place application
Low profile package
Built-in strain relief
High surge capability
High temperature soldering guaranteed
260℃/10sec/at terminals
Glass passivated chip
Fast recovery time for high efficiency

MECHANICAL DATA

Terminal：Solder plated, solderable per J-STD-002
Case：Molded with UL-94 class V-0 recognized Flame Retardant Epoxy
Polarity：color band denotes cathode

SMA / DO-214AC



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	GU1M-1	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	1000	V
Maximum RMS Voltage	Vrms	700	V
Maximum DC blocking Voltage	Vdc	1000	V
Maximum Average Forward Rectified Current 3/8″ lead length	If(av)	1.0	A
Peak Forward Surge Current 8.3ms single half sine- wave superimposed on rated load	Ifsm	30	A
Maximum Forward Voltage at rated forward current	Vf	1.7	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	10 300	μA μA
Maximum Reverse Recovery Time (Note1)	Trr	50	nS
Typical Junction Capacitance (Note 2)	Cj	15	pF
Typical Thermal Resistance (Note 3)	Rth(jl)	30	℃/W
Storage and Operating Junction Temperature	Tstg, Tj	-50 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 terminal mounted on 5×5mm copper pad area

Fig. 1 – Forward Current Derating Curve

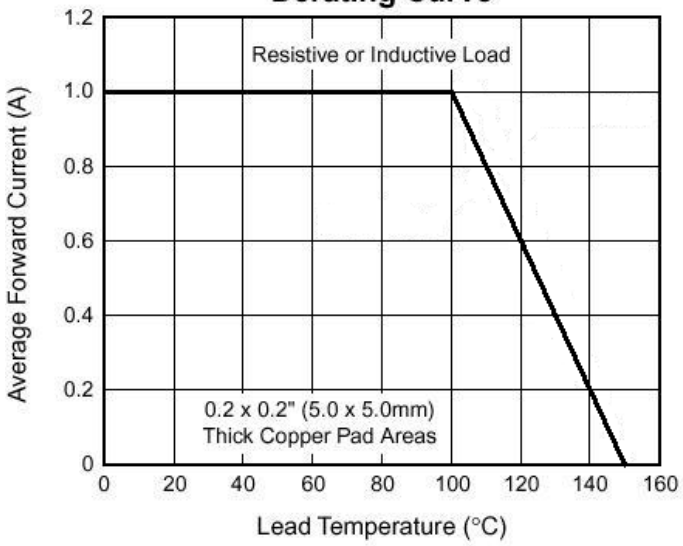
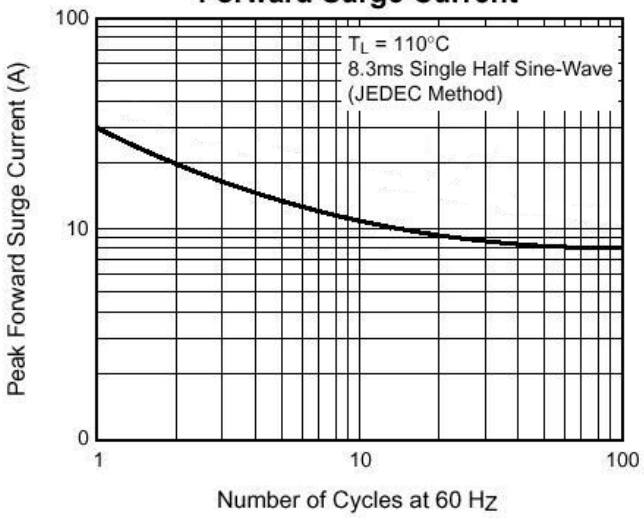
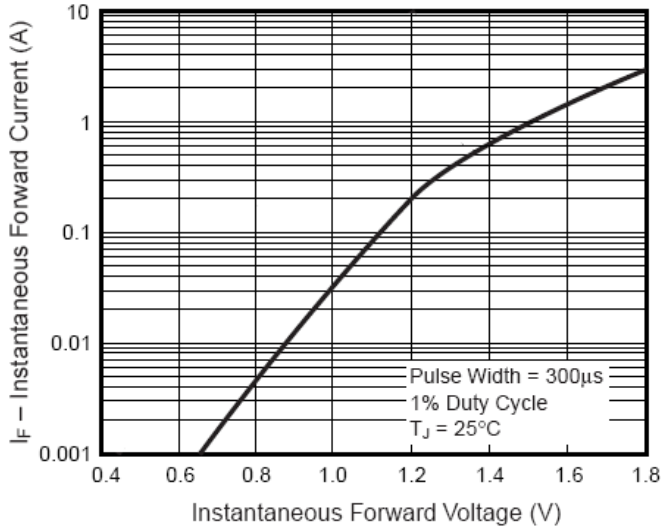


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current



Typical Instantaneous Forward Characteristics



Typical Reverse Characteristics

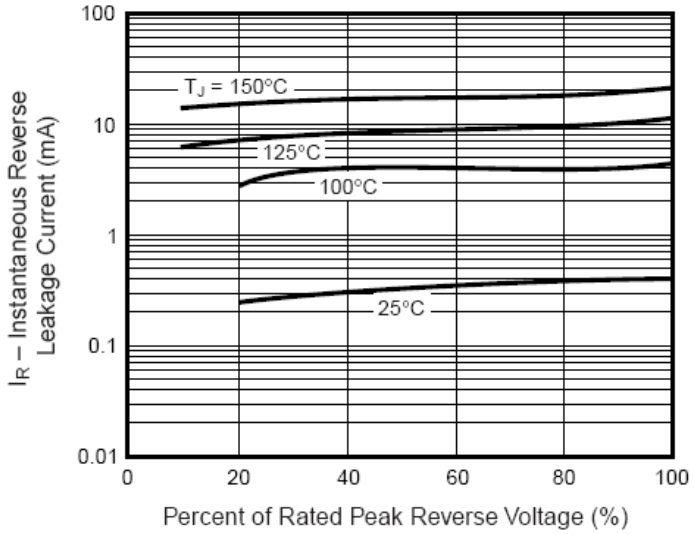


FIG. 5 - TYPICAL JUNCTION CAPACITANCE