

GU1J-E-47L

SURFACE MOUNT SWITCHING RECTIFIER

VOLTAGE: 600V

CURRENT: 1.0A



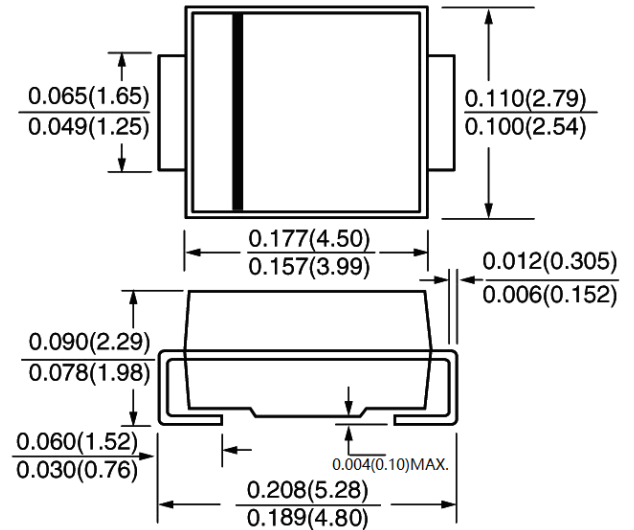
FEATURE

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

MECHANICAL DATA

Terminal: Solder plated, solderable per J-STD-002
Case: Molded with UL-94 class V-0 recognized Halogen Free 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°C, unless otherwise stated)

	Symbol	GU1J-E-47L	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	600	V
Maximum RMS Voltage	V _{rms}	420	V
Maximum DC blocking Voltage	V _{dc}	600	V
Maximum Average Forward Rectified Current 3/8" lead length at T _L =110°C	I _{f(av)}	1.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30	A
Maximum Forward Voltage at rated forward current	V _f	1.4	V
Maximum DC Reverse Current at rated DC blocking voltage	I _r	10	µA
		50	
Maximum Reverse Recovery Time (Note 1)	T _{rr}	50	nS
Typical Junction Capacitance (Note 2)	C _j	15	pF
Typical Thermal Resistance (Note 3)	R _{th(jl)}	30	°C/W
Storage and Operating Junction Temperature	T _{stg} , T _j	-50 to +150	°C

Note:

1. Reverse Recovery Condition I_f = 0.5A, I_r = 1.0A, I_{rr} = 0.25A
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
3. Thermal Resistance from Junction to terminal mounted on 5x5mm copper pad area

RATINGS AND CHARACTERISTIC CURVES GU1J-E-47L

Fig. 1 – Forward Current Derating Curve

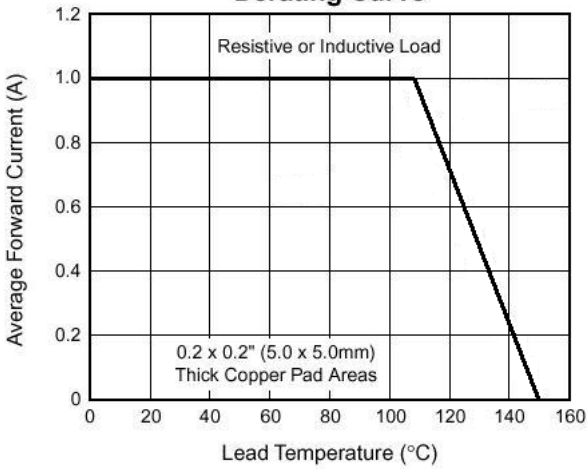


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

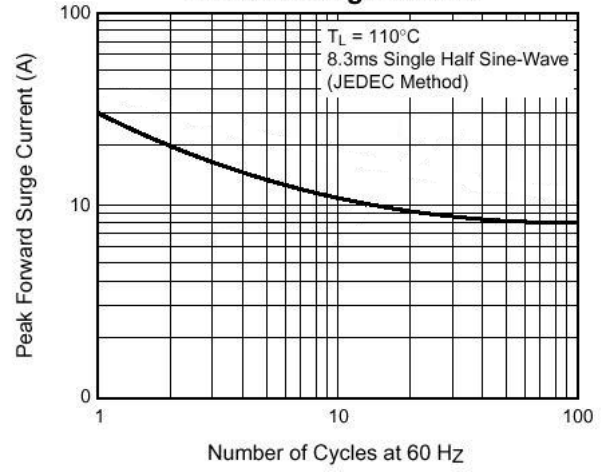


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

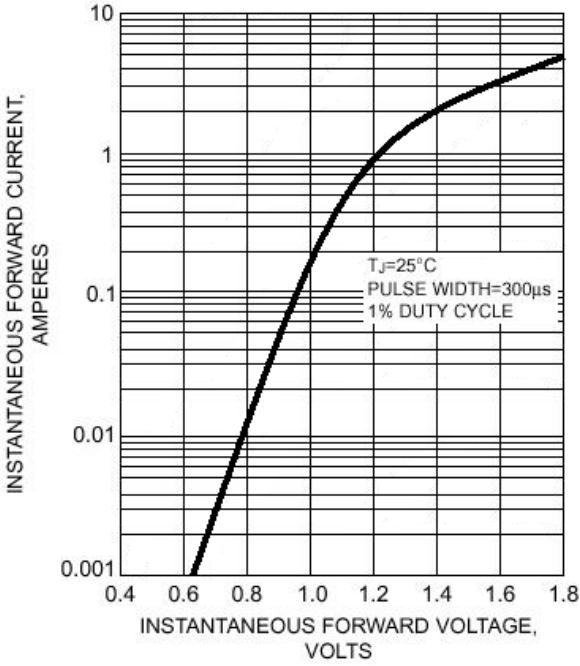


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS

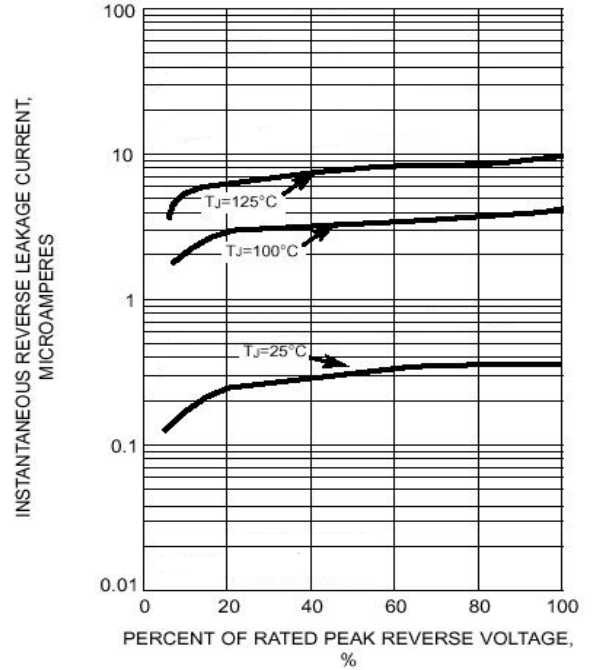


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

