UGS2J THRU UGS2K

SURFACE MOUNT
SUPERFAST RECTIFIER
VOLTAGE：600V to 800V　　CURRENT：2.0A

GULF SEMI

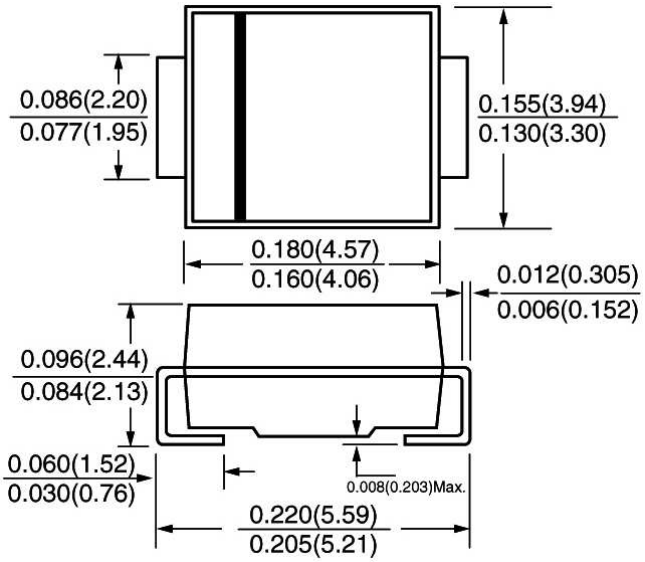
FEATURE

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
Superfast recovery time for high efficiency

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

SMB / DO—214AA



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	UGS2J	UGS2K	units
Maximum Recurrent Peak Reverse Voltage	Vrrm	600	800	V
Maximum RMS Voltage	Vrms	420	560	V
Maximum DC blocking Voltage	Vdc	600	800	V
Maximum Average Forward Rectified Current 3/8″lead length at T_L =120℃	If(av)	2.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	Ifsm	50		A
Maximum Forward Voltage at rated Forward current	Vf	1.5	2.5	V
Maximum DC Reverse Current Ta =25℃ at rated DC blocking voltage Ta =125℃	Ir	5.0 200.0		μA
Maximum Reverse Recovery Time (Note 1)	Trr	25		nS
Typical Junction Capacitance (Note 2)	Cj	25.0		pF
Typical Thermal Resistance (Note 3)	Rth(jl)	13		℃/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 terminal mounted on 5×5mm copper pad area

Fig. 1 – Forward Current Derating Curve

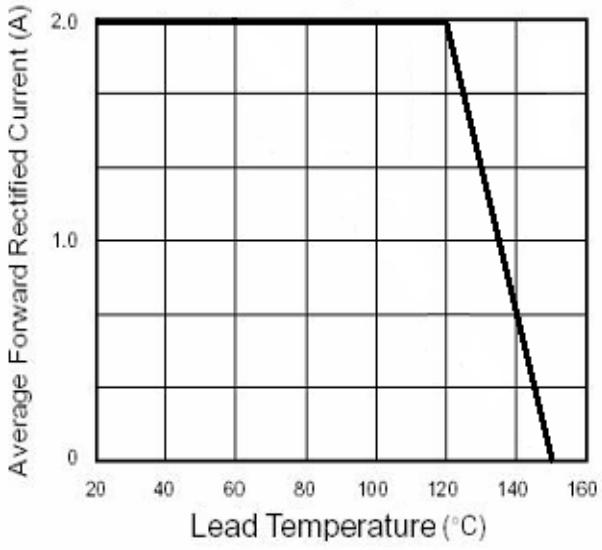


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

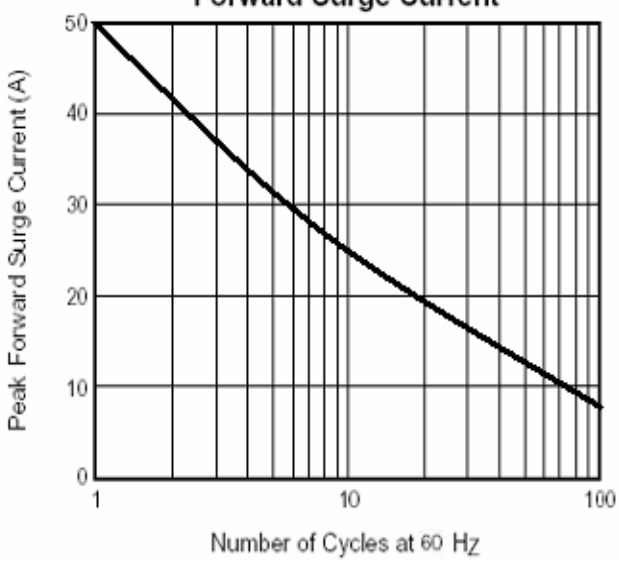


Fig. 3 – Typical Instantaneous Forward Characteristics

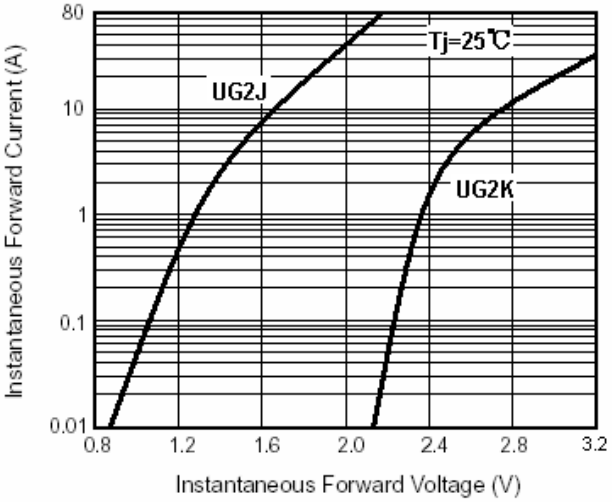


Fig. 4 – Typical Reverse Leakage Characteristics

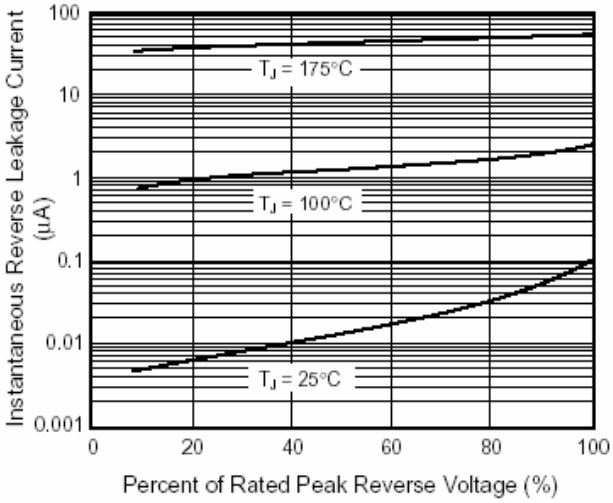


Fig. 5 – Typical Junction Capacitance