

# GS1S

## SURFACE MOUNT HIGH VOLTAGE RECTIFIER

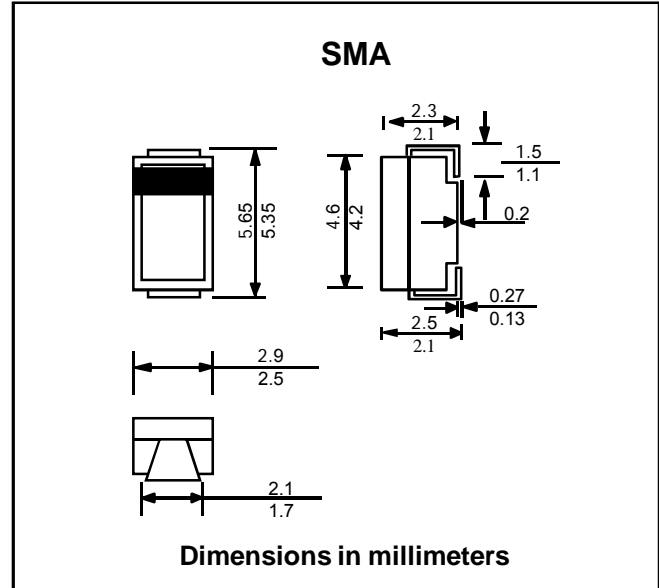
**PRV : 2500 Volts**  
**Io : 0.2 Ampere**

### FEATURES :

- \* Glass passivated junction chip
- \* Super fast recovery time
- \* High current capability
- \* High surge current capability
- \* Low reverse current
- \* Low forward voltage drop
- \* Pb / RoHS Free

### MECHANICAL DATA :

- \* Case : SMA Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.060 gram (Approximately)



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

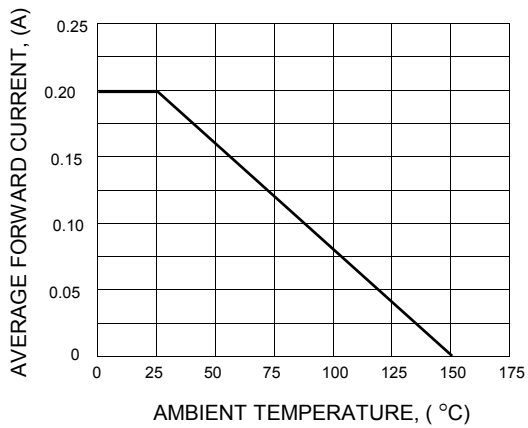
RATING	SYMBOL	VALUE	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	2500	V
Maximum RMS Voltage	$V_{RMS}$	1750	V
Maximum DC Blocking Voltage	$V_{DC}$	2500	V
Maximum Average Forward Current	$I_{F(AV)}$	0.2	A
Maximum Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$	30	A
Maximum Peak Forward Voltage at $I_F = 0.2$ A	$V_F$	6.0	V
Maximum Reverse Current at $V_R = 2000$ V, $T_a = 25$ °C	$I_R$	1.0	$\mu$ A
Maximum Reverse Recovery Time ( Note 1 )	$T_{rr}$	35	ns
Typical Junction Capacitance ( Note 2 )	$C_J$	20	pF
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$	- 40 to + 150	°C

#### Note :

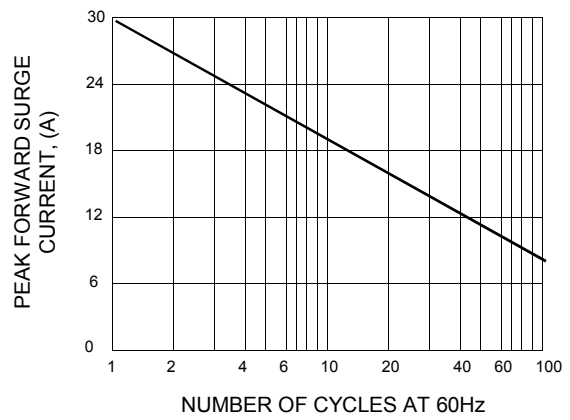
- ( 1 ) Reverse Recovery Test Conditions :  $I_F = 0.5$  A,  $I_R = 1.0$  A,  $I_{rr} = 0.25$  A.
- ( 2 ) Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC

**RATING AND CHARACTERISTIC CURVES ( GS1S )**

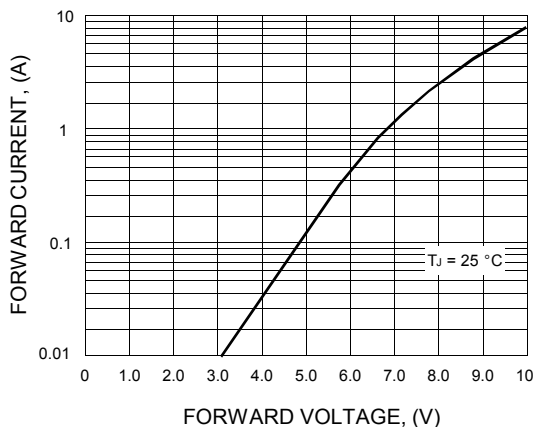
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

