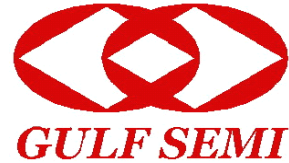


# SS1T

## SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 1300V

CURRENT: 1.0A

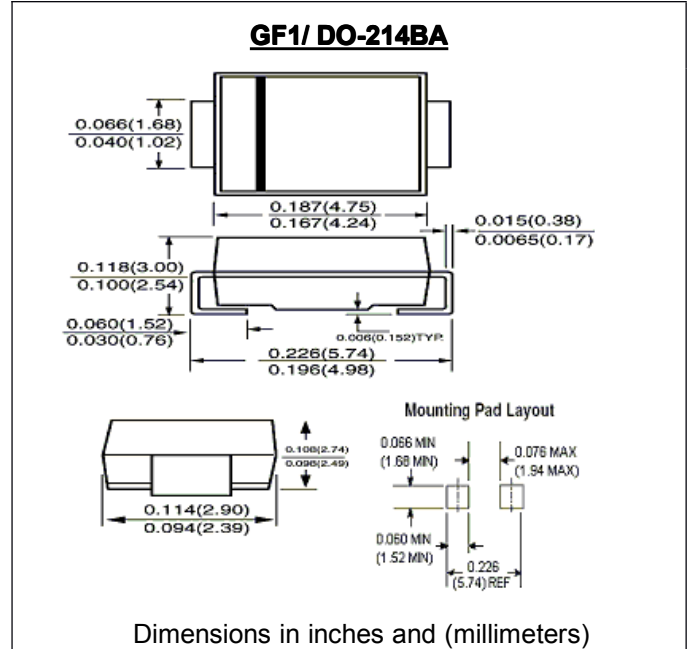


### FEATURE

- For surface mounted application
- High temperature metallurgic ally bonded
- Sintered glass junction
- Capability of meeting environmental standard of MIL-S-19500
- High temperature soldering guaranteed
- 450°C/10sec/at terminal / complete device
- Submersible temperature of 265°C for 10sec

### MECHANICAL DATA

- Terminal: Plated Terminal, solderable per MIL-STD 202, method 208C
- Case: Molded with UL-94 class V-0 recognized Flame Retardant Epoxy over Glass
- Polarity: color band denotes cathode end



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single—phase, half —wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated, for capacitive load, derate current by 20%)

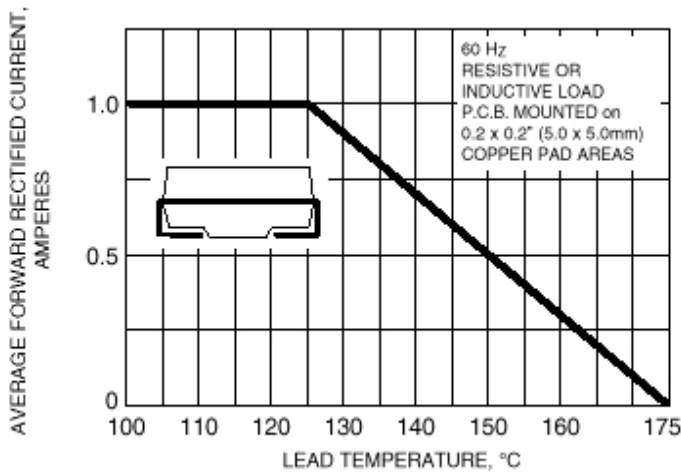
|   | SYMBOL                           | SS1T        | units |
|---|----------------------------------|-------------|-------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>rrm</sub>                 | 1300        | V     |
| Maximum RMS Voltage   | V <sub>rms</sub>                 | 910         | V     |
| Maximum DC blocking Voltage   | V <sub>dc</sub>                  | 1300        | V     |
| Maximum Average Forward Rectified Current   | I <sub>f(av)</sub>               | 1.0         | A     |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | I <sub>fsm</sub>                 | 25.0        | A     |
| Maximum Forward Voltage at rated Forward current                                  | V <sub>f</sub>                   | 1.3         | V     |
| Maximum full load reverse current full cycle average at 75°C ambient              | I <sub>r(av)</sub>               | 30.0        | μA    |
| Maximum DC Reverse Current at rated DC blocking voltage                           | I <sub>r</sub>                   | 5.0<br>50.0 | μA    |
| Typical Junction Capacitance (Note 1)   | C <sub>j</sub>                   | 13.0        | pF    |
| Typical Thermal Resistance (Note 2)   | R <sub>th(ja)</sub>              | 80.0        | °C/W  |
| Operating and Storage Temperature Range   | T <sub>st</sub> , T <sub>j</sub> | -65 to +175 | °C    |

Note:

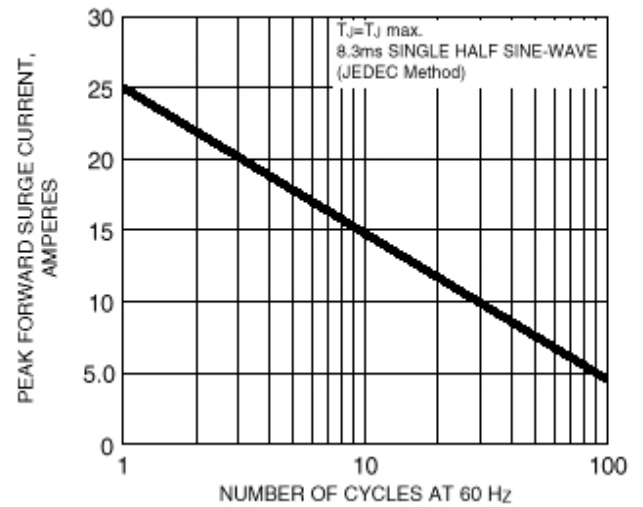
- Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- Thermal Resistance from Junction to Ambient 6.0mm<sup>2</sup> copper pad to each terminal

## RATINGS AND CHARACTERISTIC CURVES SS1T

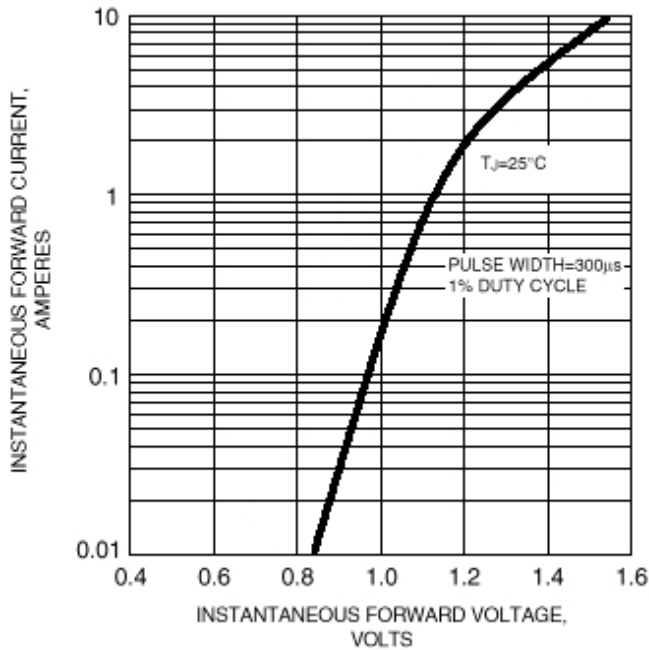
**FIG. 1 - FORWARD CURRENT DERATING CURVE**



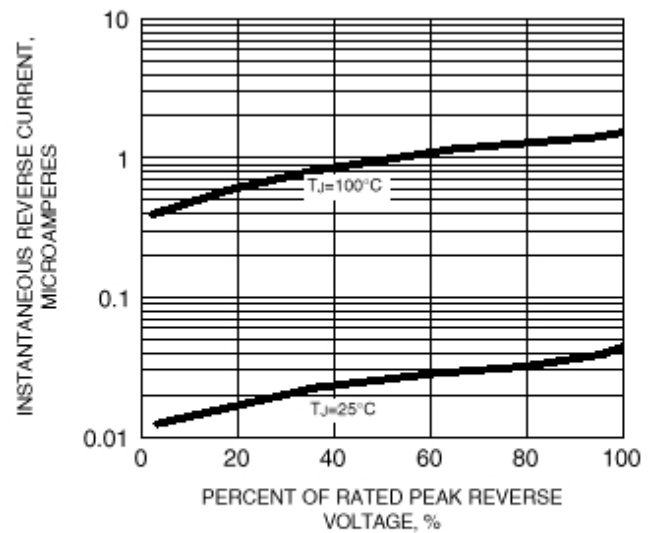
**FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



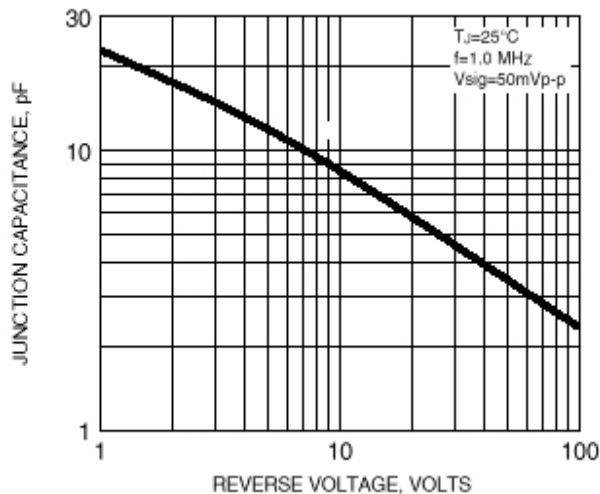
**FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4 - TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 - TYPICAL JUNCTION CAPACITANCE**



**FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE**

