# SSF1KG

## ULTRAFAST EFFICIENT GLASS PASSIVATED RECTIFIER

**VOLTAGE: 800V** **CURRENT: 1.0A**

GULF SEMI

## FEATURE

Low power loss
High surge capability
Ultra-fast recovery time for high efficiency
Glass passivated chip junction
High temperature soldering guaranteed
250°C/10sec/0.375”lead length at 5 lbs tension

## 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

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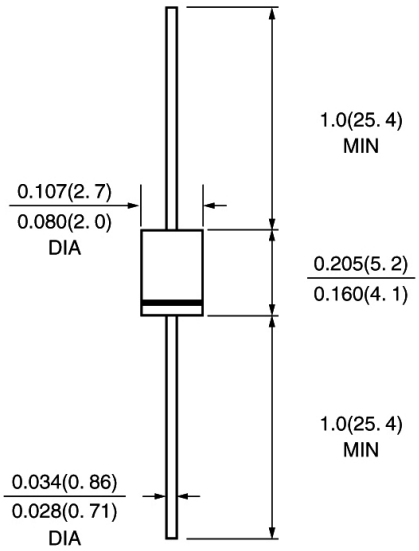


Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

| | SYMBOL | SSF1KG | units |
|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | Vrrm | 800 | V |
| Maximum RMS Voltage | Vrms | 560 | V |
| Maximum DC blocking Voltage | Vdc | 800 | V |
| Maximum Average Forward Rectified Current 3/8”lead length at Ta =55°C | If(av) | 1.0 | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | Ifsm | 30.0 | A |
| Maximum Forward Voltage at Forward current 1A Peak | Vf | 1.70 | V |
| Maximum DC Reverse Current Ta =25°C<br>at rated DC blocking voltage Ta =125°C | Ir | 10.0<br>100.0 | μA |
| Maximum Reverse Recovery Time (Note 1) | Trr | 35 | nS |
| Typical Junction Capacitance (Note 2) | Cj | 10 | pF |
| Storage and Operating Junction Temperature | Tstg,Tj | -55 to +150 | °C |

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

## RATINGS AND CHARACTERISTIC CURVES SSF1KG

FIG.1- MAXIMUM AVERAGE FORWARD CURRENT DERATING

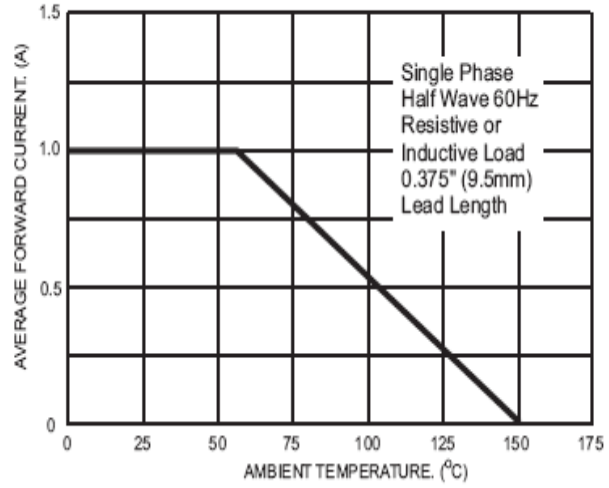


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

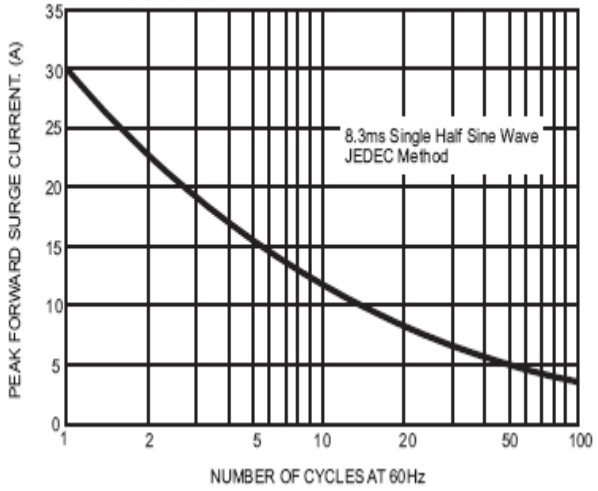


FIG.3- TYPICAL FORWARD CHARACTERISTICS

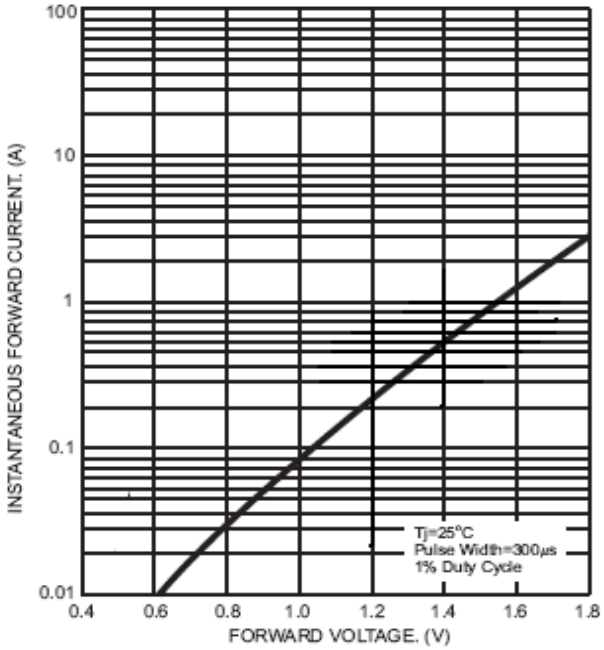


FIG.4- TYPICAL REVERSE CHARACTERISTICS

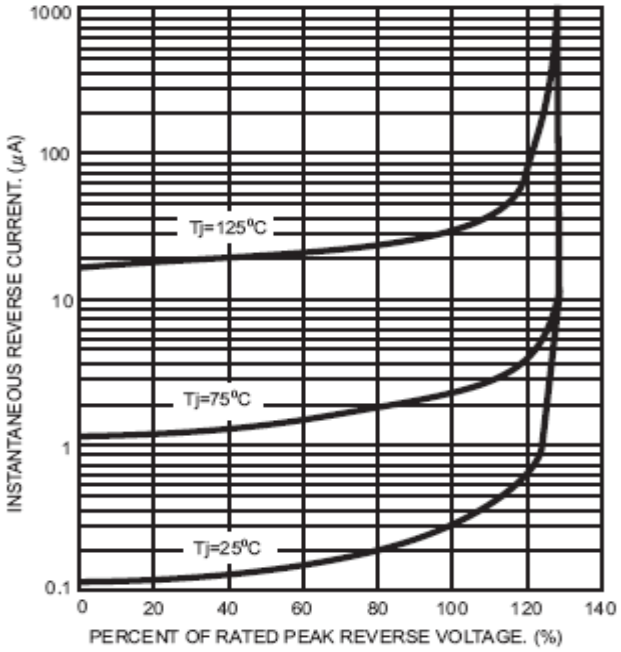


FIG.5- TYPICAL JUNCTION CAPACITANCE