

SS1B-18C & SS1M-18C



SINTERED GLASS JUNCTION SURFACE MOUNTED RECTIFIER

VOLTAGE: 100V, 1000V

CURRENT: 1.0A

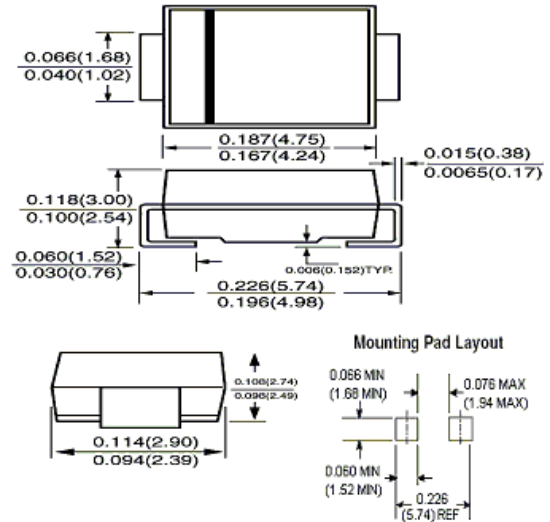
FEATURE

- 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 260°C for 10sec
- Meet Standard of AEC-Q101

MECHANICAL DATA

- Terminal: Plated Terminal, solderable per J-STD-002
- Case: Molded with UL-94 class V-0 recognized
- Flame Retardant Epoxy over Glass
- Polarity: color band denotes cathode end

GF1/ DO-214BA



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	SS1B-18C	SS1M-18C	units
Maximum Recurrent Peak Reverse Voltage	V _{rrm}	100	1000	V
Maximum RMS Voltage	V _{rms}	70	700	V
Maximum DC blocking Voltage	V _{dc}	100	1000	V
Maximum Average Forward Rectified Current	I _{f(av)}	1.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I _{fsm}	30.0		A
Maximum Forward Voltage at rated Forward current	V _f	1.1	1.2	V
Maximum full load reverse current full cycle average at 75°C ambient	I _{r(av)}	30.0		µA
Maximum DC Reverse Current	I _r	T _a =25°C	5.0	µA
at rated DC blocking voltage		T _a =125°C	50.0	
Typical Junction Capacitance	C _j	(Note 1)		pF
Typical Thermal Resistance	R _{th(ja)}	(Note 2)		°C/W
Operating and Storage Temperature Range	T _{st} , T _j	-65 to +175		°C

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V_{dc}
2. Thermal Resistance from Junction to Ambient 6.0mm² copper pad to each terminal

RATINGS AND CHARACTERISTIC CURVES SS1B-18C & SS1M-18C

FIG. 1 - FORWARD CURRENT DERATING CURVE

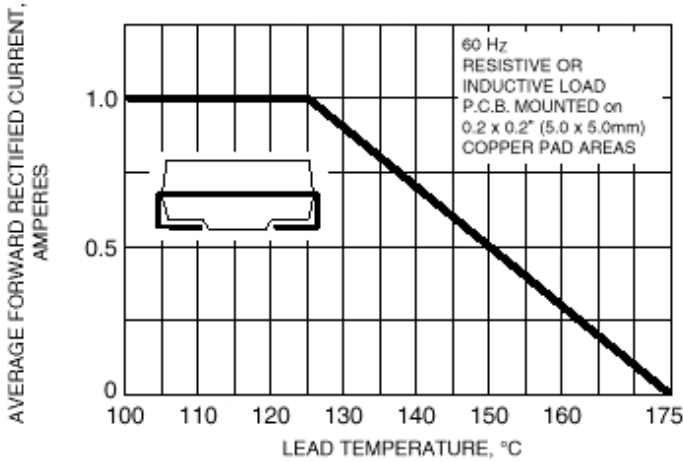


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

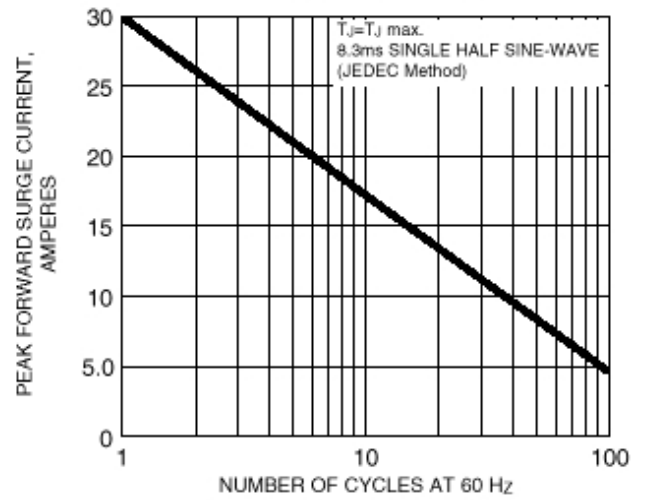


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

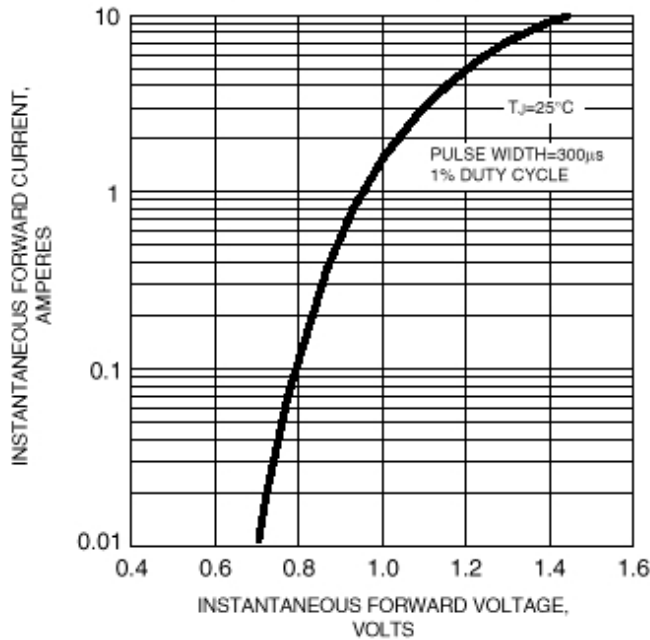


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS

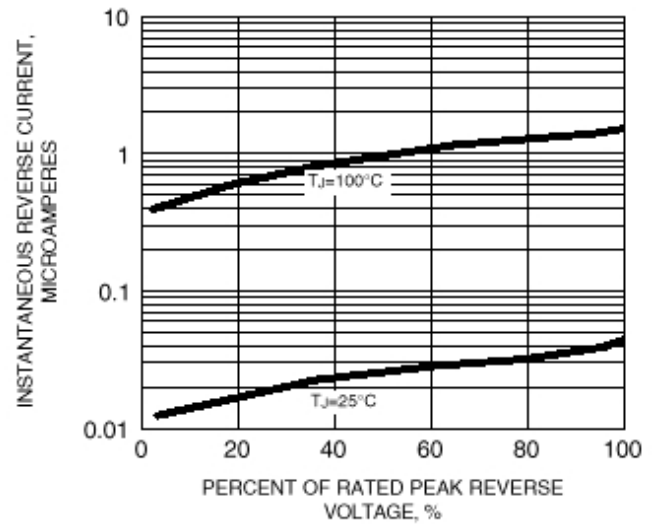


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

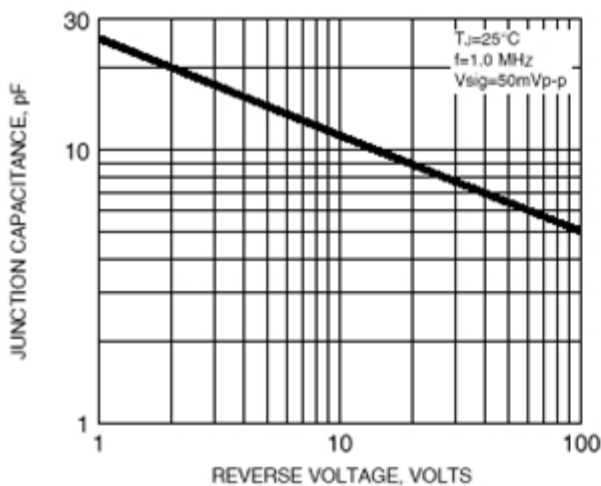


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

