



## **FEATURES**

- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

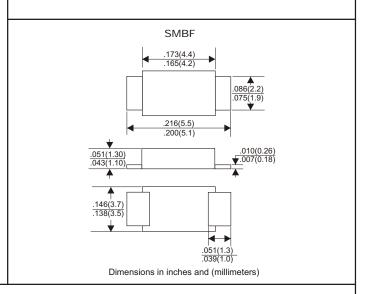
## **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any

## VOLTAGE RANGE 40 Volts

### **CURRENT**

5.0 Amperes



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

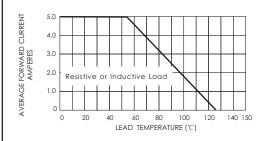
TYPE NUMBER	SSL54	UNITS
Maximum Recurrent Peak Reverse Voltage	40	V
Maximum RMS Voltage	28	V
Maximum DC Blocking Voltage	40	V
Maximum Average Forward Rectified Current		
See Fig. 1	5.0	А
Peak Forward Surge Current, 8.3 ms single half sine-wave		
superimposed on rated load (JEDEC method)	120	А
Maximum Instantaneous Forward Voltage at 5.0A	0.46	V
Maximum DC Reverse Current Ta=25°C	1.0	mA
at Rated DC Blocking Voltage Ta=100°C	50	mA
Typical Junction Capacitance (Note1)	380	pF
Typical Thermal Resistance R JL (Note 2)	25	°C/W
Operating Temperature Range T <sub>J</sub>	-55 <del> +</del> 125	°C
Storage Temperature Range Tstg	-55 <del></del> +150	°C

#### NOTES

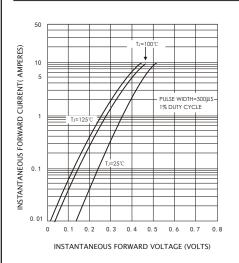
- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Unit mounted on PC board with 5.0mm× 5.0 mm (0.013 mm thick) copper pads as heat sink

### RATING AND CHARACTERISTIC CURVES (SSL54)

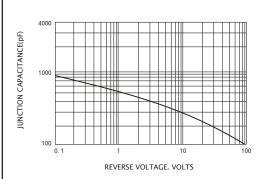
#### FIG.1-FORWARD CURRENT DERATING CURVE



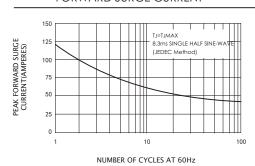
# FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



#### FIG.5-TYPICAL JUNCTION CAPACITANCE



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



#### FIG.4-TYPICAL REVERSE CHARACTERISTICS

