

SS54L 5.0 AMP SCHOTTKY BARRIER RECTIFIERS

FEATURES

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

MECHANICAL DATA

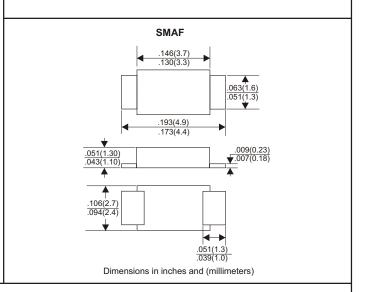
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

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	SS54L	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	0.45	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)	28	°C/W
Operating Temperature Range T _J	-55 — +150	°C
Storage Temperature Range Tsτs	-55 — +150	°C

NOTES

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

RATING AND CHARACTERISTIC CURVES (SS54L)

FIG.1-FORWARD CURRENT DERATING CURVE

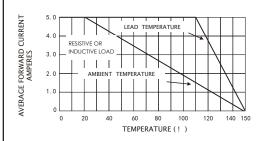


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

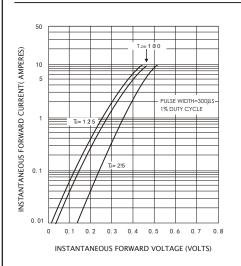


FIG.5-TYPICAL JUNCTION CAPACITANCE

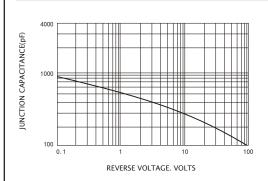


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

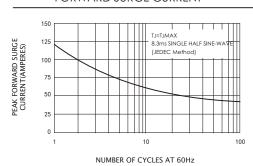


FIG.4-TYPICAL REVERSE CHARACTERISTICS

