

## SS54L THRU SS510L



## 5.0 AMP SMD LOW VF SCHOTTKY BARRIER RECTIFIERS

## FEATURES

- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.093 grams
- \* Both normal and Pb free product are available:
- \* Normal: 80~95%Sn, 5~20%Pb
- \* Pb free: 99 Sn above can meet Rohs environment substance directive request

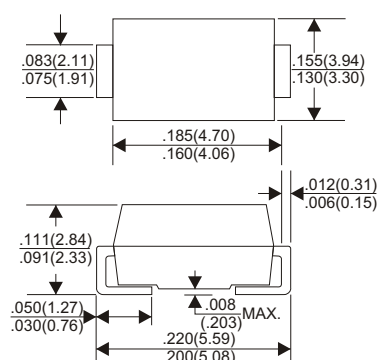
## VOLTAGE RANGE

40 to 100 Volts

## CURRENT

5.0 Ampere

## DO-214AA(SMB)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	SS54L	SS56L	SS510L	UNITS
Maximum Recurrent Peak Reverse Voltage	40	60	100	V
Maximum RMS Voltage	28	42	70	V
Maximum DC Blocking Voltage	40	60	100	V
Maximum Average Forward Rectified Current				
See Fig. 1	5.0			V
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150			A
Maximum Instantaneous Forward Voltage at 5.0A	0.45	0.55	0.65	V
Maximum DC Reverse Current Ta=25°C	0.1			mA
at Rated DC Blocking Voltage Ta=100°C	10			mA
Typical Junction Capacitance (Note 1)	380			pF
Typical Thermal Resistance R JA (Note 2)	10			°C/W
Operating Temperature Range Tj	-65 — +150			°C
Storage Temperature Range TSTG	-65 — +150			°C

## NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

## RATING AND CHARACTERISTIC CURVES (SS54L THRU S510L)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

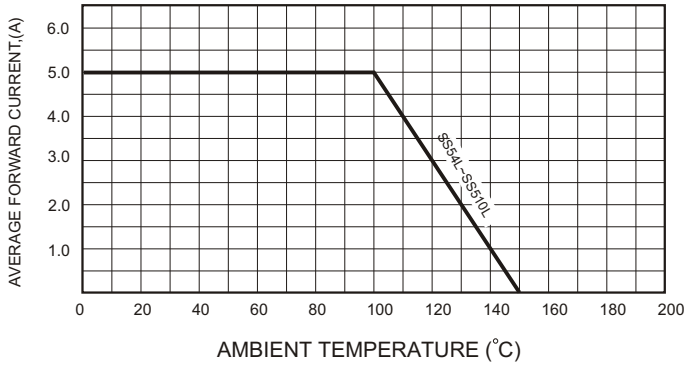


FIG.2-TYPICAL FORWARD CHARACTERISTICS

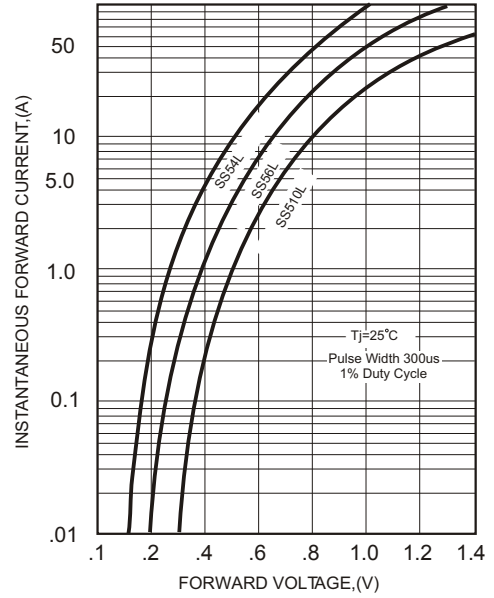


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

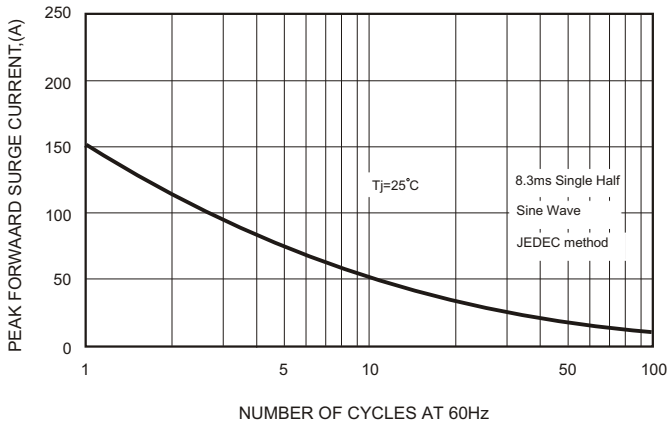


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

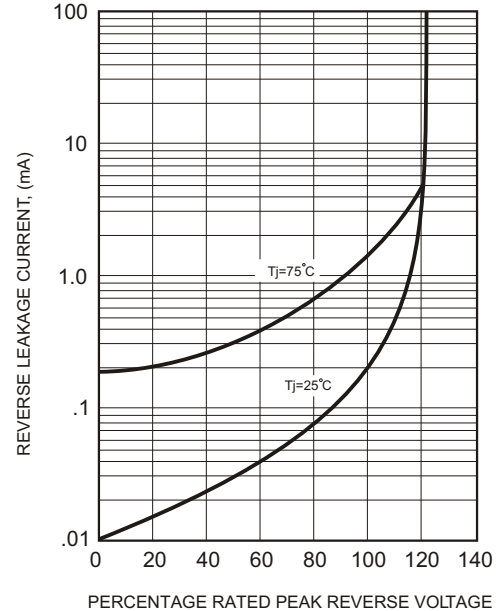


FIG.4-TYPICAL JUNCTION CAPACITANCE

