

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

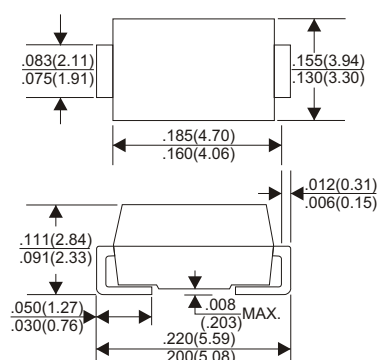
VOLTAGE RANGE

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

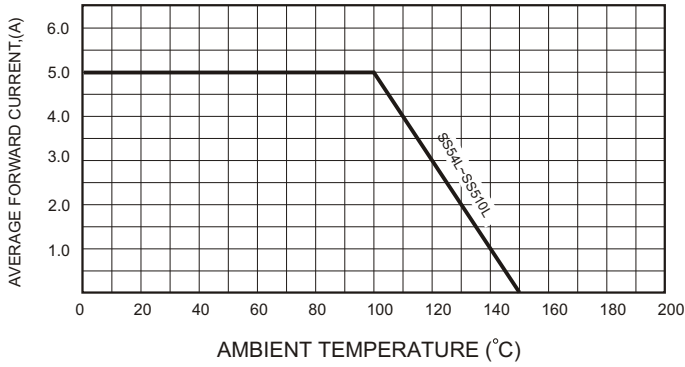


FIG.2-TYPICAL FORWARD CHARACTERISTICS

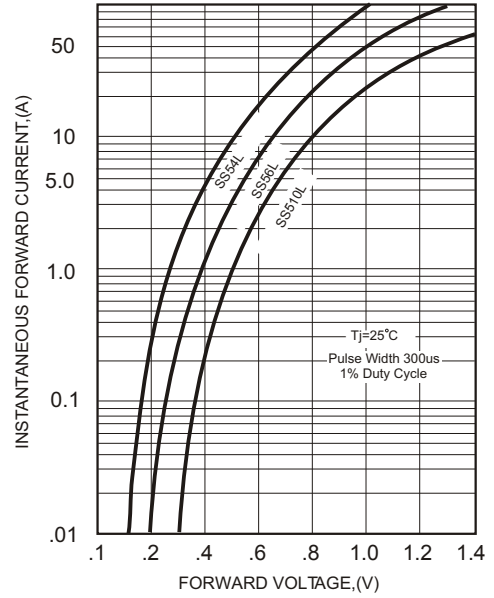


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

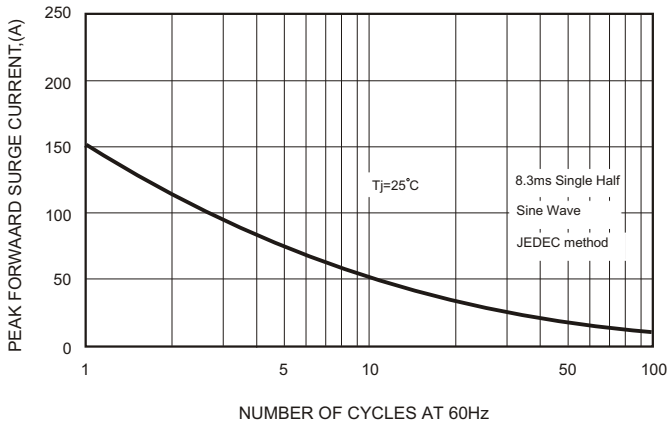


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

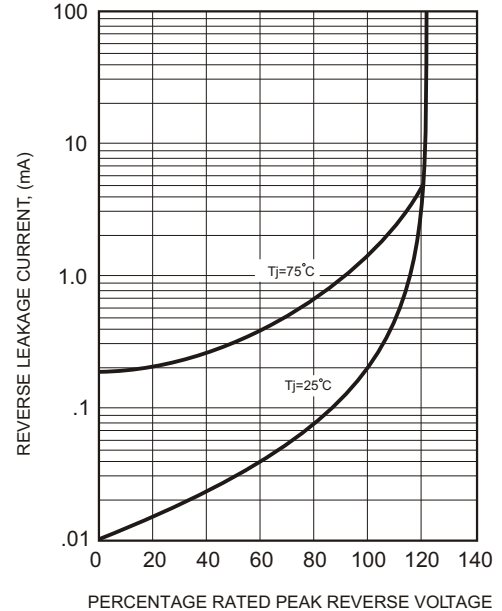


FIG.4-TYPICAL JUNCTION CAPACITANCE

