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## **FEATURES**

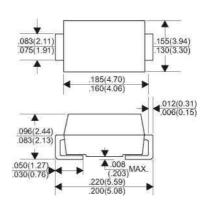
- \* Ideal for surface mount applications
- \* Easy pick and place
- \* Built-in strain relief
- \* Low forward voltage drop

## **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Metallurgically bonded construction
- \* Polarity: Color band denotes cathode end
- Mounting position: AnyWeight: 0.093 grams

## VOLTAGE RANGE 100 Volts CURRENT 5.0 Amperes

#### DO-214AA(SMB)



Dimensions in inches and (millimeters)

## **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

TYPE NUMBER	SS510L	UNITS
Maximum Recurrent Peak Reverse Voltage	100	V
Maximum RMS Voltage	70	V
Maximum DC Blocking Voltage	100	V
Maximum Average Forward Rectified Current		
See Fig. 1	5.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on		
rated load (JEDEC method)	120	A
Maximum Instantaneous Forward Voltage at 5.0A	0.67	V
Maximum DC Reverse Current Ta=25°C	0.1	mA
at Rated DC Blocking Voltage Ta=125C	20	mA
Typical Junction Capacitance (Note1)	370	pF
Typical Thermal Resistance R JA (Note 2)	70	*C/W
Operating Temperature Range T <sub>J</sub>	-55 —125	°C
Storage Temperature Range Tsrg	-55 —150	°C

NOTES:

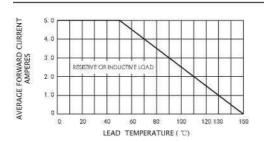
- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Unit mounted on PC boord with 5.0mmX 5.0 mm (0.013 mm thick) copper pods os heot sink



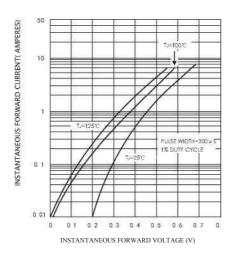
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## RATING AND VHARACTERISTIC CURVES(SS510L)

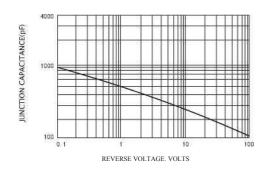
#### FIG.1-FORWARD CURRENT DERATING CURVE



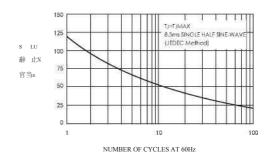
# FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



### FIG.5-TYPICAL JUNCTION CAPACITANCE



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



### FIG.4-TYPICAL REVERSE CHARACTERISTICS

