

## 8.0 AMP SURFACE MOUNT 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
- \* Weight: 0.093 grams

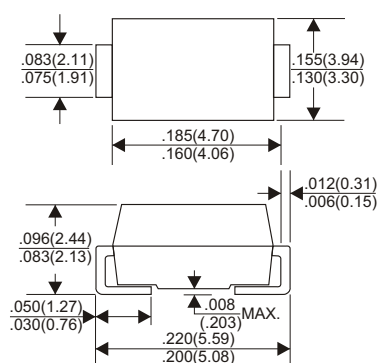
### VOLTAGE RANGE

40 to 200 Volts

### CURRENT

8.0Ampere

#### 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	SS84B	SS86B	SS810B	SS815B	SS820B	UNITS
Maximum Recurrent Peak Reverse Voltage	45	60	100	150	200	V
Maximum RMS Voltage	32	42	70	105	140	V
Maximum DC Blocking Voltage	45	60	100	150	200	V
Maximum Average Forward Rectified Current See Fig. 1	8.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150					A
Maximum Instantaneous Forward Voltage at 8.0A	0.55	0.7	0.85	0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	0.1		0.02			μA
	5		2			mA
Typical Junction Capacitance (Note1)	350					pF
Typical Thermal Resistance R <sub>JA</sub> (Note 2)	55					°C/W
Operating Temperature Range T <sub>J</sub>	—		-55 to +150		—	°C
Storage Temperature Range T <sub>stg</sub>	-55 to +150					°C

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
2. P.C.B. mounted with 0.4x0.4" (10x10mm) copper pad areas

## RATING AND CHARACTERISTIC CURVES (SS84B THRU SS820B)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

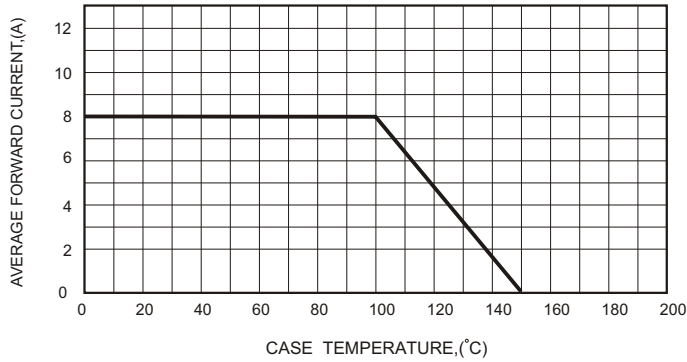


FIG.2-TYPICAL FORWARD CHARACTERISTICS

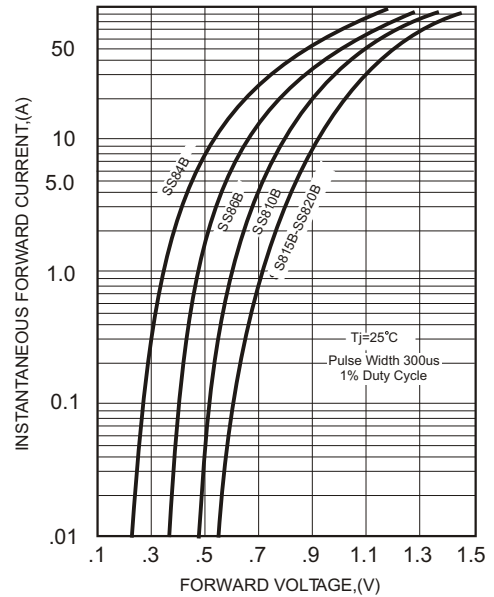


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

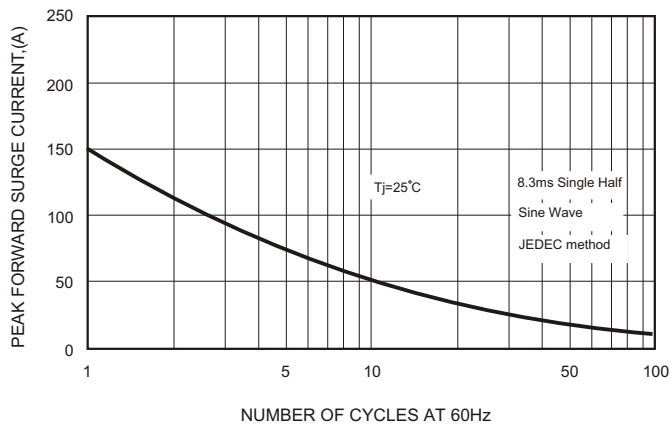


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

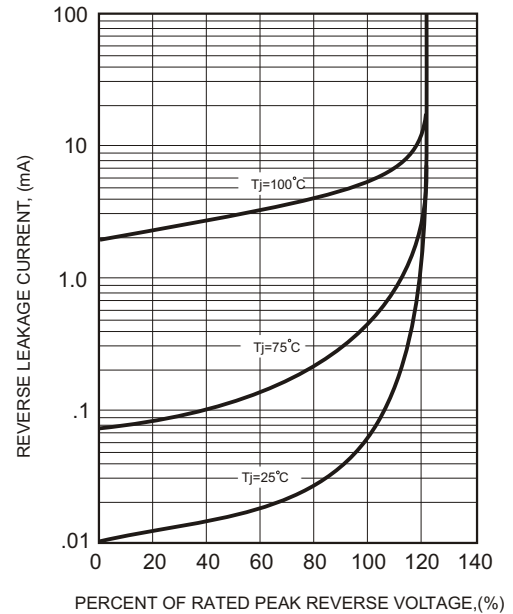


FIG.4-TYPICAL JUNCTION CAPACITANCE

