

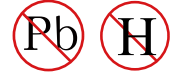


YEA SHIN TECHNOLOGY CO., LTD

SR315 THRU SR320

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE- 150 to 200 Volts CURRENT- 3.0 Amperes



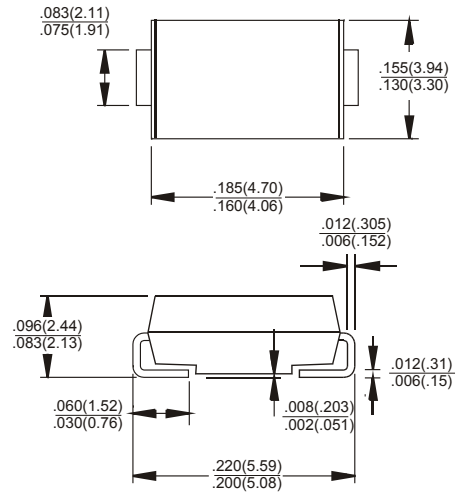
**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier. majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C /10 seconds at terminals

**MECHANICAL DATA**

Case: JEDEC DO-214AA molded plastic  
 Terminals:Solder plated, solderable per MIL-STD-750, Method 2026  
 Polarity: Color band denotes positive end (cathode)  
 Standard packaging: 12mm tape (EIA-481)  
 Weight: 0.003 ounce, 0.093 gram

SMB/DO-214AA Unit:inch(mm)



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
 Resistive or inductive load.

	SYMBOLS	SR315	SR320	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	150	200	V
Maximum Average Forward Rectified Current (See figure 1)	I(AV)	3.0		A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80.0		A
Maximum Instantaneous Forward Voltage at 3.0A	V <sub>F</sub>	0.90	0.92	V
Maximum DC Reverse Current Ta= 25°C at Rated DC Blocking Voltage Ta= 100°C	I <sub>R</sub>	0.2 5		mA
Maximum Thermal Resistance	R <sub>θJC</sub>	35		°C/W
Typical Junction Capacitance (NOTE1)	C <sub>J</sub>	80		pF
Operating and Storage Temperature Range	T <sub>J</sub>	-55 to +150		°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150		°C

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0Vdc.

# DEVICE CHARACTERISTICS

## SR315 THRU SR320

FIG. 1-Typical Forward Current Derating Curve

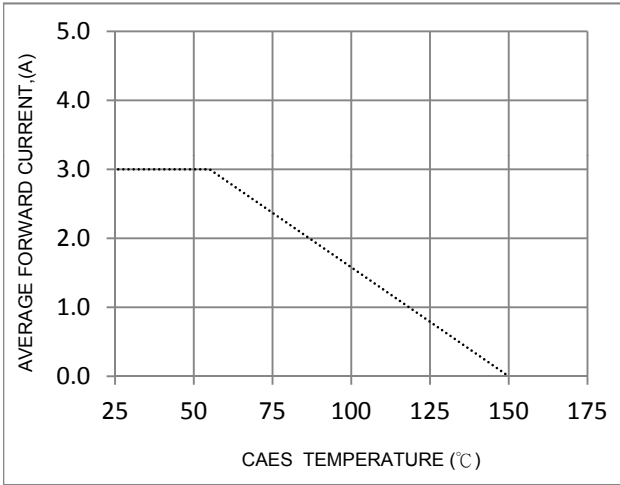


FIG. 2-Typical Forward Characteristics

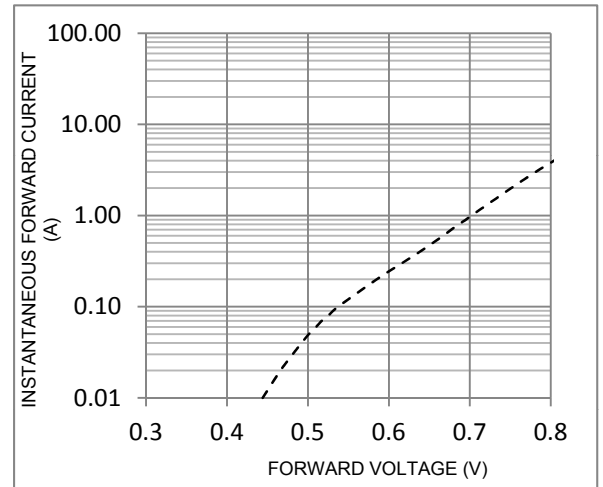


FIG. 3-Maximum Non-Repetitive Forward Surge Current

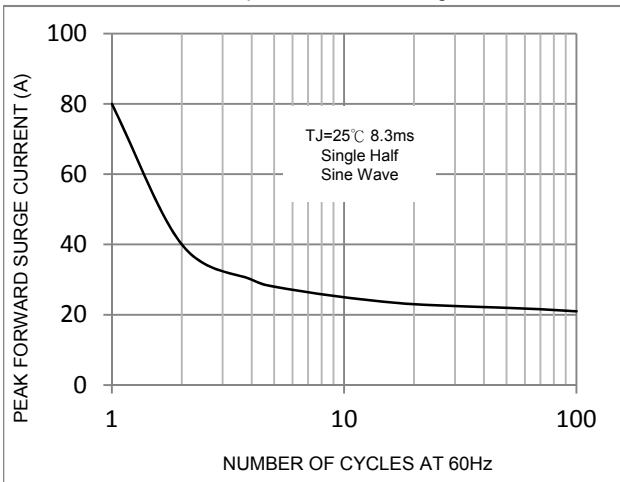


FIG. 4-Typical Reverse Characteristics

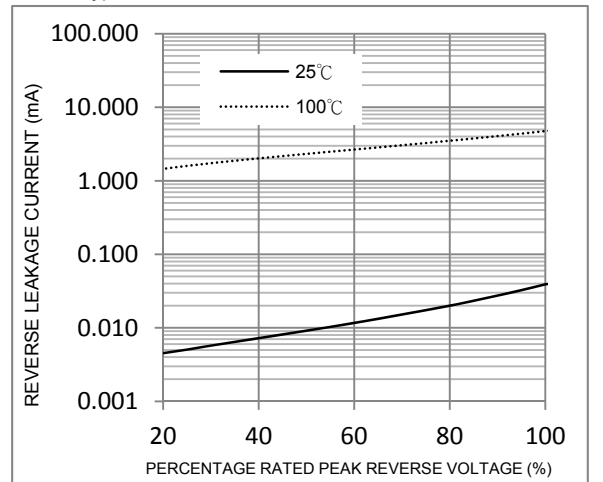


FIG. 5-Typical Junction Capacitance

