



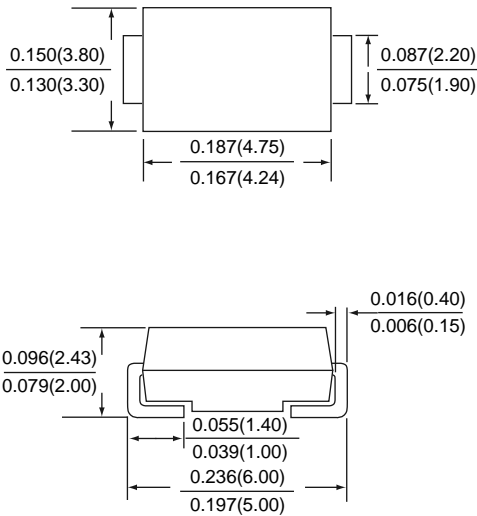
# SS32H THRU SS310H

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

*Reverse Voltage - 20 to 100 Volts*

*Forward Current - 3.0 Amperes*

**SMB / DO-214AA**



\*Dimensions in inches and (millimeters)



**Lead free product**

### FEATURES

- \* Halogen-free type
- \* Compliance to RoHS product
- \* Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- \* For surface mount applications
- \* Low power loss, high efficiency
- \* High current capability, low forward voltage drop
- \* Guardring for overvoltage protection
- \* 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 body  
**Terminals :** Tin plated, solderable per MIL-STD-750D Method 2026  
**Polarity :** Color band denotes cathode end  
**Weight :** 0.003 ounces , 0.093 gram

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified.                                 |          | SYMBOLS        | SS32H       | SS34H | SS36H       | SS310H | UNITS  |
|--|----------|----------------|-------------|-------|-------------|--------|--------|
| Maximum repetitive peak reverse voltage  |          | VRRM           | 20          | 40    | 60          | 100    | Volts  |
| Maximum RMS voltage  |          | VRMS           | 14          | 28    | 42          | 70     | Volts  |
| Maximum DC blocking voltage  |          | VDC            | 20          | 40    | 60          | 100    | Volts  |
| Maximum average forward rectified current (SEE FIG.1)  |          | I(AV)          | 3.0         |       |             |        | Amps   |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) |          | IFSM           | 80          |       |             |        | Amps   |
| Maximum instantaneous forward voltage at 3.0 A (NOTE 1)  |          | VF             | 0.50        |       | 0.70        | 0.85   | Volts  |
| Maximum DC reverse current at rated DC blocking voltage (NOTE 1)                                 | TA=25°C  | IR             | 0.5         |       |             |        | mA     |
|  | TA=100°C |                | 20          |       | 10          |        |        |
| Typical thermal resistance (NOTE 2)  |          | R θJA<br>R θJL | 55<br>17    |       |             |        | °C / W |
| Operating junction temperature range   |          | TJ             | -55 to +125 |       | -55 to +150 |        | °C     |
| Storage temperature range  |          | TSTG           | -55 to +150 |       |             |        | °C     |

NOTES : (1) Pulse test : 300us pulse width, 1% duty cycle  
 (2) P.C.B. mounted with 0.55 x 0.55" ( 14 x 14mm ) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES SS32H THRU SS310H

FIG. 1 - FORWARD CURRENT DERATING CURVE

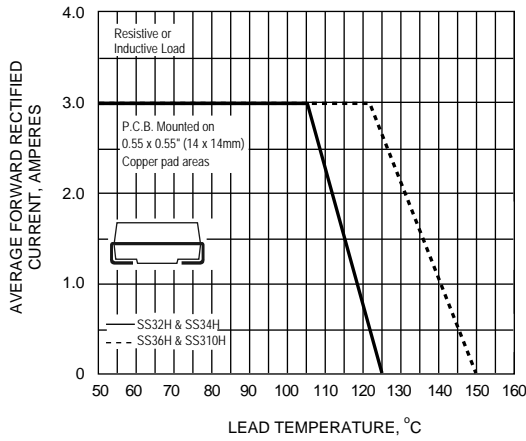


FIG. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

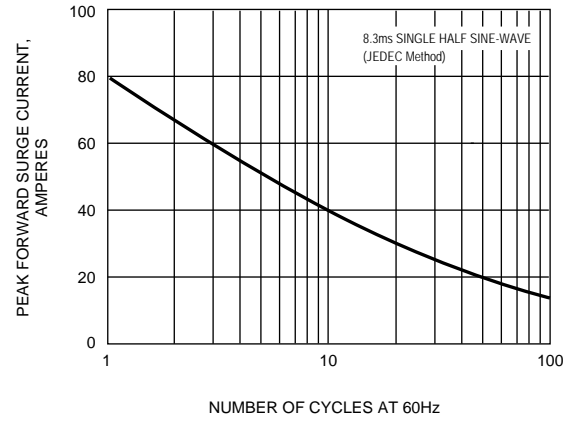


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

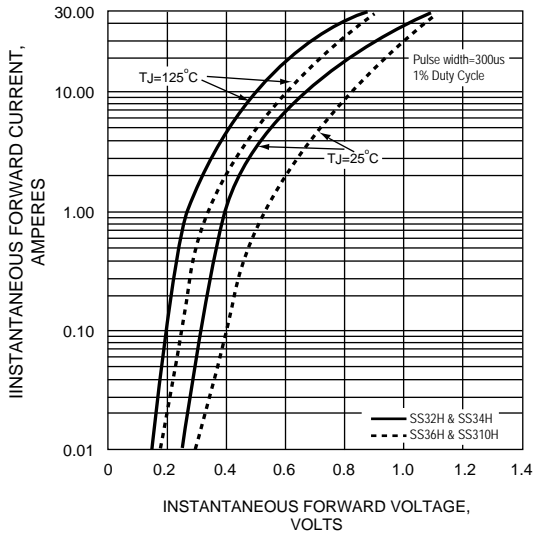


FIG. 4 - TYPICAL REVERSE CURRENT CHARACTERISTICS

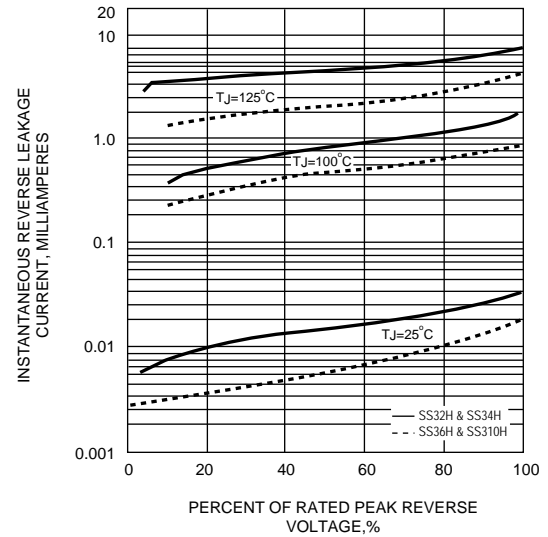


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

