

SS32B THRU SS310B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
 VOLTAGE RANGE 20 to 100 Volts CURRENT 3.0 Ampere

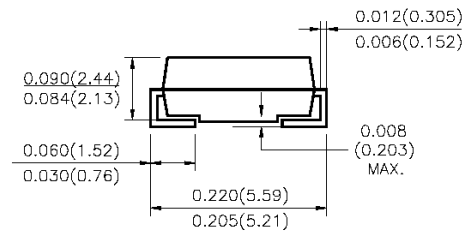
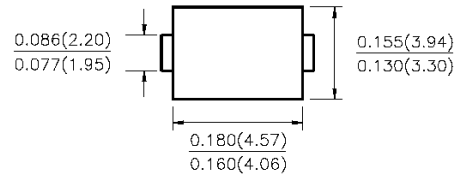
FEATURES

- ◆ Low profile surface mount package
- ◆ Built-in strain relief
- ◆ High switching speed
- ◆ Low voltage drop, high efficiency
- ◆ For use in low voltage high frequency inverters
- ◆ Free willing, and polarity protection applications
- ◆ Guarding for over voltage protection

Mechanical Data

- ◆ Case: Transfer molded plastic
- ◆ Epoxy: UL 94V-0 rate flame retardant
- ◆ Lead: Solder plated, solderable per MIL-STD-750 method 2026
- ◆ Polarity: Color band denotes cathode end

DO-214AA (SMB)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

| PARAMETER | SYMBLS | SS 32B | SS 33B | SS 34B | SS 35B | SS 36B | SS 38B | SS 39B | SS 310B | UNIT |
|-----------------------------------------------------------------------------------------------------|-------------------|-------------|--------|--------|--------|--------|--------|--------|---------|-------|
| Maximum Repetitive Peak Reverse | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | Volts |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 63 | 70 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | 100 | Volts |
| Maximum Average Forward Rectified Current at TL see figure 1 TL =105°C | I _(AV) | 3.0 | | | | | | | | Amps |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 80 | | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage @ 3.0A(Note 1) | V _F | 0.55 | 0.55 | 0.70 | | | 0.85 | | Volts | |
| Maximum DC Reverse Current at rated DC Blocking Voltage per element | TA = 25°C | 0.5 | | | | | | | | mA |
| | TA = 100°C | 20.0 | | | 10.0 | | | | | |
| Typical Thermal Resistance | R _{θJA} | 55 | | | | | | | | °C/W |
| | R _{θJL} | 12 | | | | | | | | |
| Operating Junction Temperature | T _J | -55 to +125 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | | °C |

Note: 1. Pulse test: 300µs pulse width, 1% duty cycle

2. PCB mounted with 0.55"×0.55"(14mm×14mm) copper pad

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RATING AND CHARACTERISTIC CURVES SS32B THRU SS310B

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

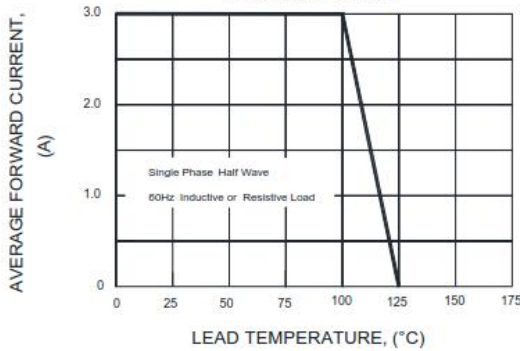


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

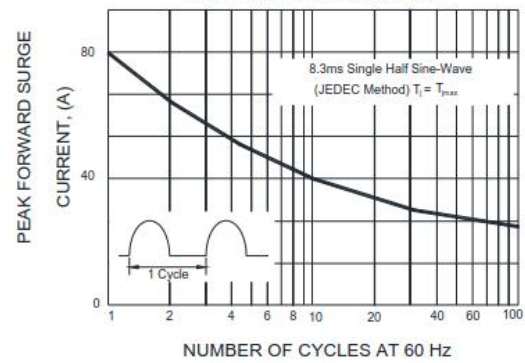


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

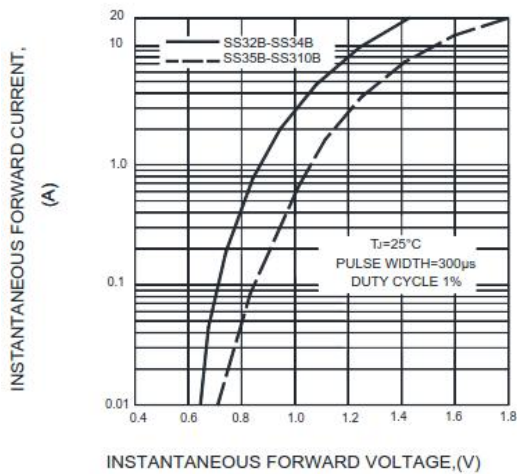


FIG.4-TYPICAL REVERSE CHARACTERISTICS

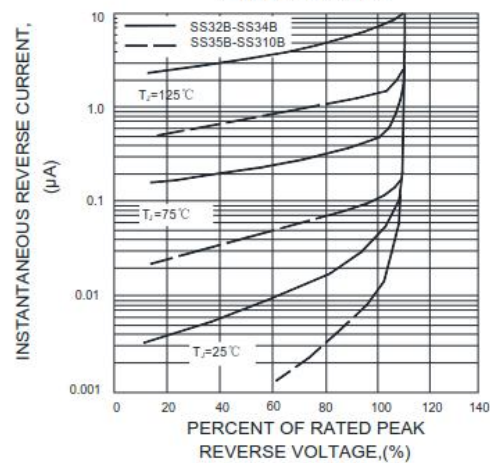
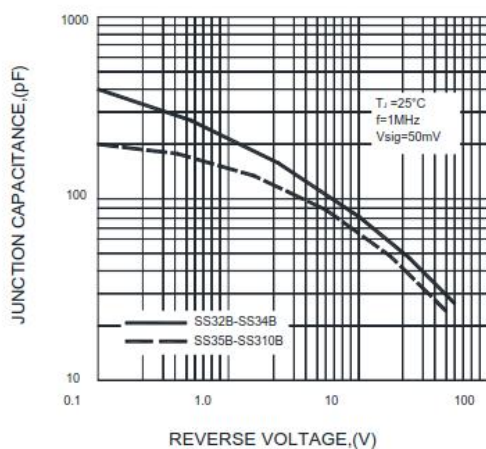


FIG.5-TYPICAL JUNCTION CAPACITANCE



Note: Specifications are subject to change without notice. For more detail and update, please visit our website.