

SCHOTTKY BARRIER RECTIFIERS

PRODUCT SUMMARY

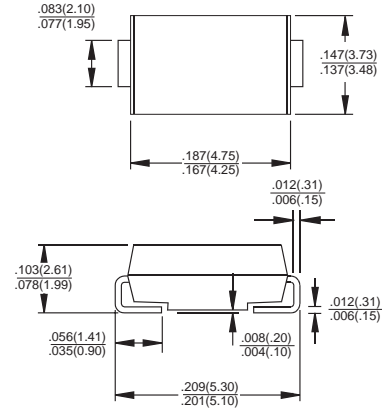
2.0 AMPS Surface Mount

FEATURES

- For surface mounted application
- Easy pick and place
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High current capability, low VF
- High surge current capability
- Plastic material used carriers Underwriters
- Laboratory Classification 94V-0
- Epitaxial construction
- High temperature soldering:
260 °C / 10 seconds at terminals



SMB/DO-214AA



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: Molded plastic
- Terminals: Pure tin plated, lead free.
- Polarity: Indicated by cathode band
- Packaging: 12mm tape per EIA STD RS-481
- Weight: 0.093gram



Pb-free; RoHS-compliant

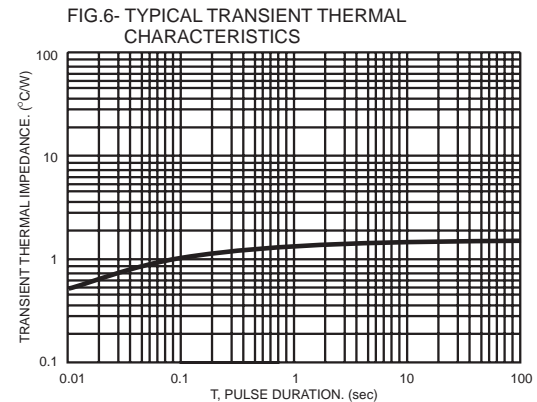
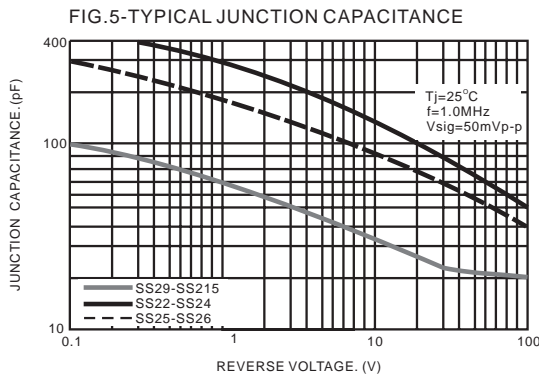
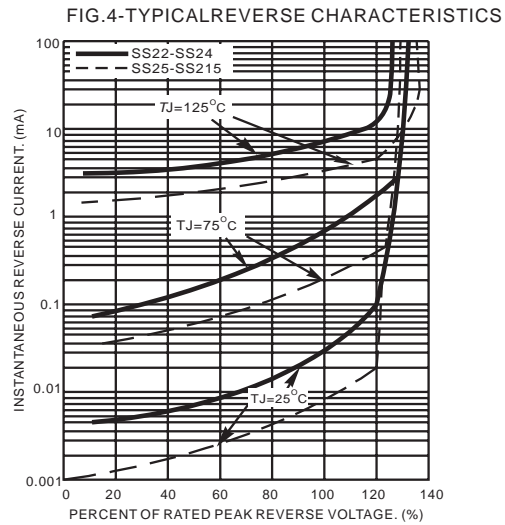
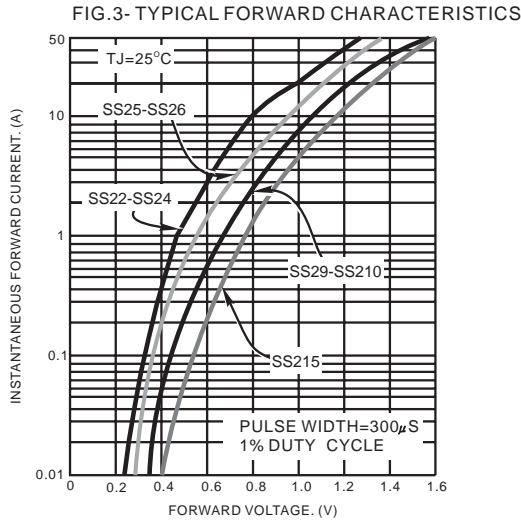
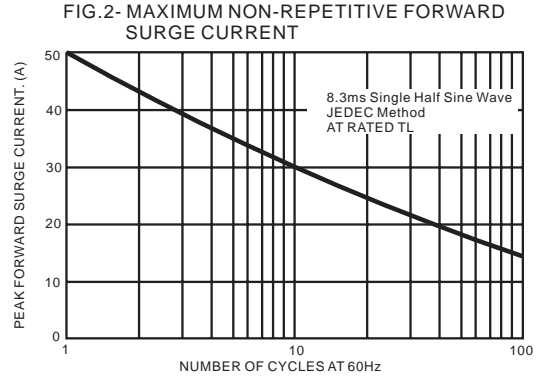
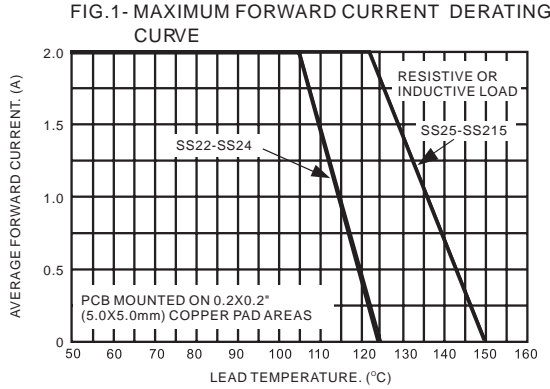
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
 Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

| Type Number | Symbol | SS 22 | SS 23 | SS 24 | SS 25 | SS 26 | SS 29 | SS 210 | SS 215 | Units |
|-----------------------------------------------------------------------------------------------------|------------------------------------|-------------|-------|--------------|-------|--------------|-------|--------------|--------|----------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 90 | 100 | 150 | V |
| Maximum RMS Voltage | V_{RMS} | 14 | 21 | 28 | 35 | 42 | 63 | 70 | 105 | V |
| Maximum DC Blocking Voltage | V_{DC} | 20 | 30 | 40 | 50 | 60 | 90 | 100 | 150 | V |
| Maximum Average Forward Rectified Current at T_L (See Fig. 1) | $I_{(AV)}$ | 2.0 | | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | 50 | | | | | | | | A |
| Maximum Instantaneous Forward Voltage (Note 1) IF= 2.0A @ 25 °C @ 100 °C | V_F | 0.5 0.4 | | 0.70 0.65 | | 0.85 0.70 | | 0.95 0.80 | | v |
| Maximum DC Reverse Current @ $T_A=25\text{ °C}$ at Rated DC Blocking Voltage @ $T_A=125\text{ °C}$ | I_R | 0.4 | | | | 0.1 | | | | mA mA |
| Typical Junction Capacitance (Note 3) | C_j | 130 | | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JL}$ $R_{\theta JA}$ | 17 | | | | 75 | | | | °C/W |
| Operating Temperature Range | T_J | -65 to +125 | | | | -65 to +150 | | | | °C |
| Storage Temperature Range | T_{STG} | -65 to +150 | | | | | | | | °C |

- Notes:
1. Pulse Test with PW=300 usec, 1% Duty Cycle
 2. Measured on P.C.Board with 0.4" x 0.4"(10mm x 10mm) Copper Pad Areas.
 3. Measured at 1 MHz and Applied Reverse Voltage of 4.0V D.C.

RATINGS AND CHARACTERISTIC CURVES (SS22 THRU SS215)



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