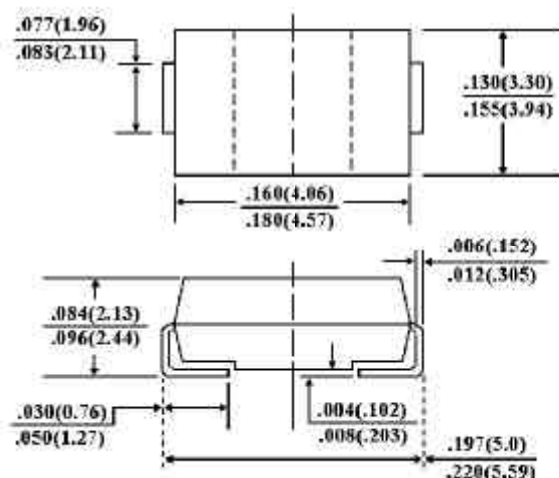


FEATURES

Plastic package has Underwriters Laboratory
Flammability Classification 94V-O
For surface mounted applications
Low profile package
Built-in strain relief
Metal to silicon rectifier
majority carrier conduction
Low power loss, High efficiency
High current capability, low V_F
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

SMB/DO-214AA



Dimensions in inches and (millimeters)

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Resistive or inductive load.

| | SYMBOLS | SR32 | SR33 | SR34 | SR35 | SR36 | SR38 | SR39 | UNITS |
|---|--|-------------|------|------|------|------|------|------|-------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | Volts |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 64 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | Volts |
| Maximum Average Forward Rectified Current at T _L (See Figure 1) | 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 at 3.0A (Note 1) | V _F | 0.50 | | | 0.70 | | 0.85 | | Volts |
| Maximum DC Reverse Current T _A =25 ºC(Note 1) At Rated DC Blocking Voltage T _A =100 ºC | I _R | 0.5 20.0 | | | | | | | mA |
| Maximum Thermal Resistance (Note 2) | R _{θKJL} R _{θKJA} | 17 55 | | | | | | | ºC/W |
| Operating Junction Temperature Range | T _J | -50 to +125 | | | | | | | ºC |
| Storage Temperature Range | T _{STG} | -50 to +150 | | | | | | | ºC |

NOTES:

- Pulse Test with PW=300 µsec, 2% Duty Cycle.
- Mounted on P.C.Board with 5.0mm² (.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES
SR32 THRU SR39

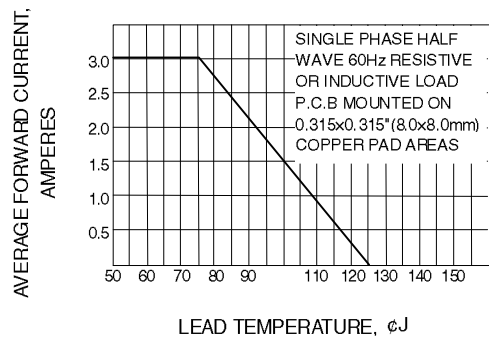


Fig. 1-FORWARD CURRENT DERATING CURVE

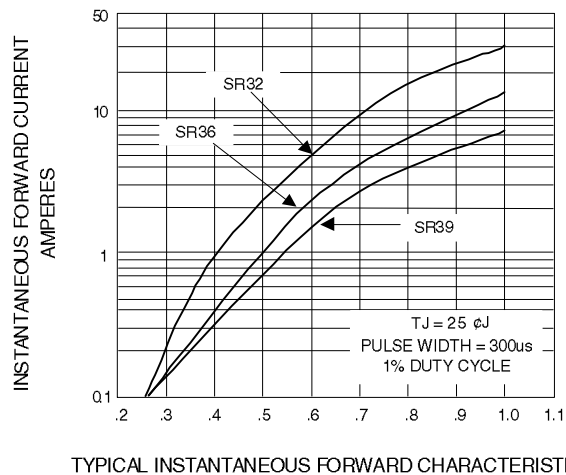


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

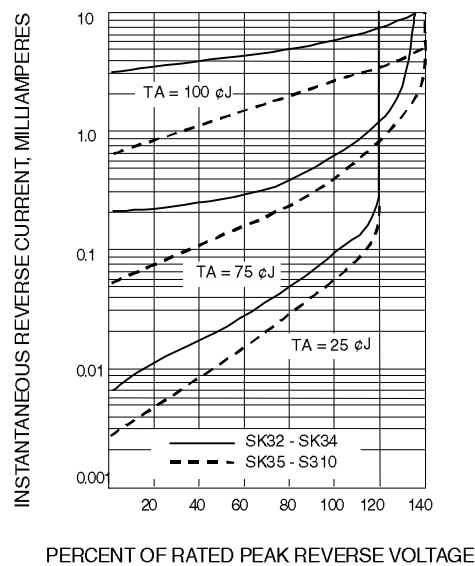


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

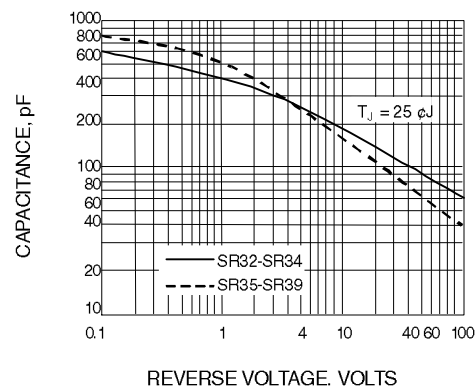


Fig. 4-TYPICAL JUNCTION CAPACITANCE

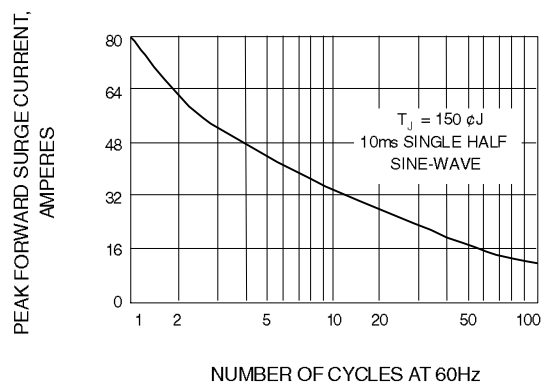


Fig. 5-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT