



DATA SHEET

SR22~SR29

MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 20 to 90 Volts **CURRENT** 2.0 Amperes

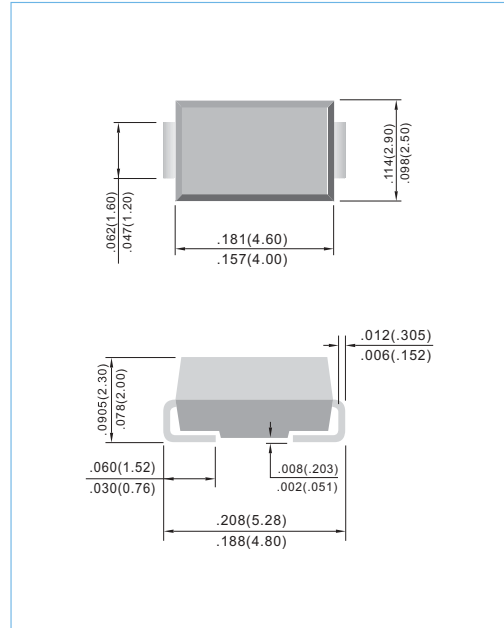
SMA/DO-214AC Unit: inch (mm)

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 surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 99% Sn above

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic
 Terminals:Solder plated, solderable per MIL-STD-202G, Method 208
 Polarity: Color band denotes positive end (cathode)
 Standard packaging: 12mm tape (EIA-481)
 Weight: 0.002 ounce, 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | SR22 | SR23 | SR24 | SR25 | SR26 | SR28 | SR29 | UNITS |
|--|--------------------------------------|-------------|------|------|------|------|------|------|--------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | V |
| Maximum RMS Voltage | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 63 | V |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 90 | V |
| Maximum Average Forward Current .375"(9.5mm) lead length at TL=75°C | I _{AV} | 2.0 | | | | | | | A |
| Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I _{FSM} | 50 | | | | | | | A |
| Maximum Forward Voltage at 2.0A (Note 1) | V _F | 0.5 | | 0.7 | | 0.85 | | V | |
| Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C | I _R | 0.5 | | | | 20 | | | mA |
| Maximum Thermal Resistance (Note 2) | R _{θJL} R _{θJA} | 20 | | | | 75 | | | °C / W |
| Operating Junction Temperature Range | T _J | -55 to +125 | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +150 | | | | | | | °C |

NOTES:

1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm² (.013mm thick) copper pad areas.



RATING AND CHARACTERISTIC CURVES

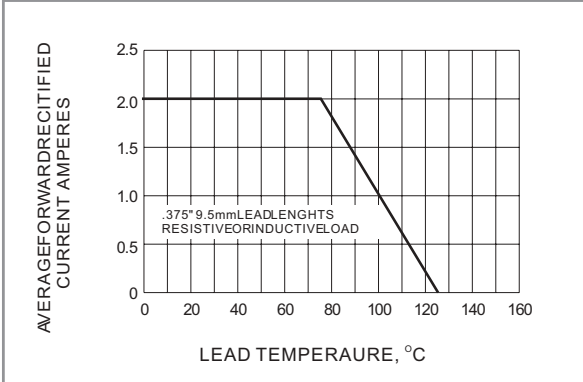


Fig.1- FORWARD CURRENT DERATING CURVE

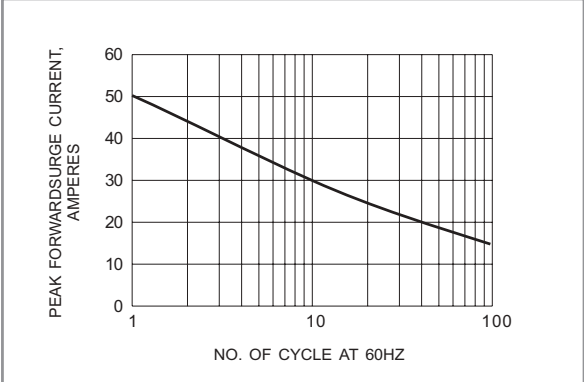


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

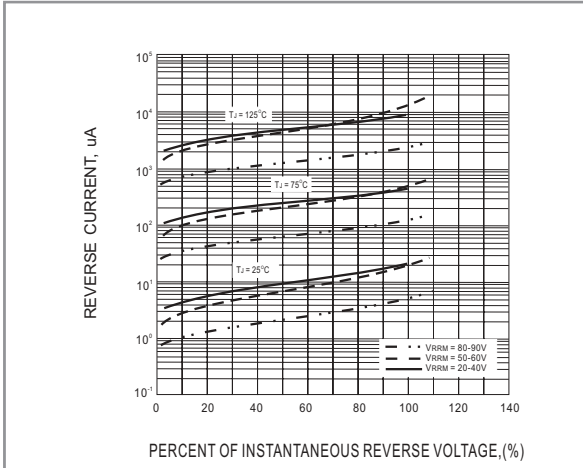


Fig.3- TYPICAL REVERSE CHARACTERISTIC

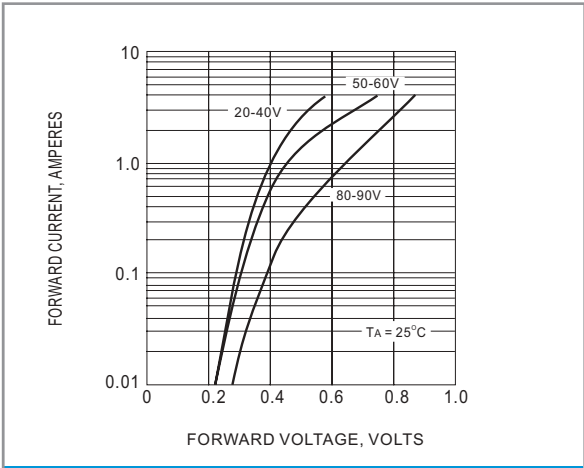


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC