

# DATA SHEET

## SR32 thru SR39

### MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 20 to 90 Volts

**CURRENT**

3.0 Amperes

**SMB/DO-214AA**

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
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

#### MECHANICAL DATA

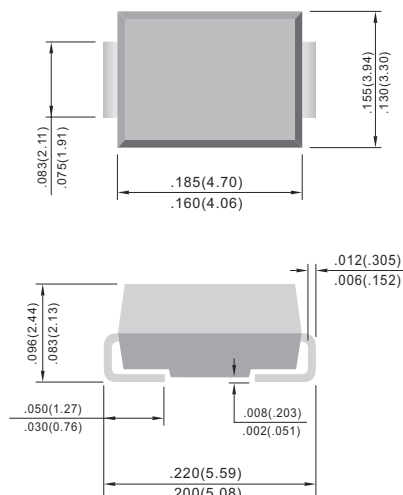
Case: JEDEC DO-214AA molded plastic

Terminals:Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: Color band denotes positive end (cathode)

Standard packaging: 12mm tape (EIA-481)

Weight: 0.093 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	SR32	SR33	SR34	SR35	SR36	SR38	SR39	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	90	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	64	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	90	V
Maximum Average Forward Current .375"(9.5mm ) lead length at TL=75°C	I <sub>AV</sub>	3.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80							A
Maximum Forward Voltage at 3.0A (Note 1)	V <sub>F</sub>	0.5			0.75		0.85		V
Maximum DC Reverse Current at TA=25°C Rated DC Blocking Voltage TA=100°C	I <sub>R</sub>	0.5 20							mA
Maximum Thermal Resistance (Note 2)	R <sub>θJL</sub> R <sub>θJA</sub>	20 75							°C / W
Operating Junction Temperature Range	T <sub>J</sub>	-55 TO +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 TO +150							°C

#### NOTES:

1. Pulse Test with  $PW=300\mu sec$ , 2% Duty Cycle.
2. Mounted on P.C. Board with  $8.0mm^2$  (.013mm thick) copper pad areas.

## RATING AND CHARACTERISTIC CURVES

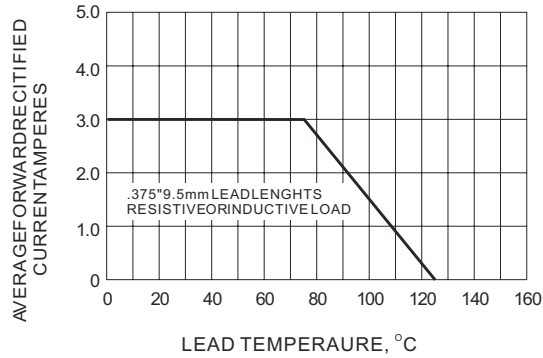


Fig.1- FORWARD CURRENT DERATING CURVE

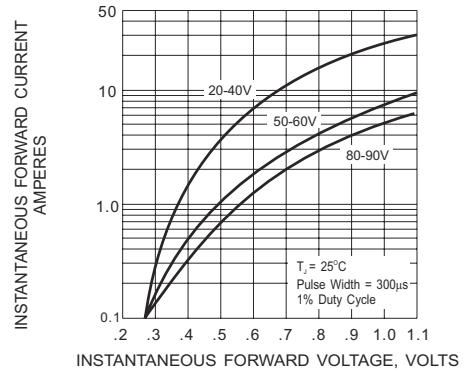


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

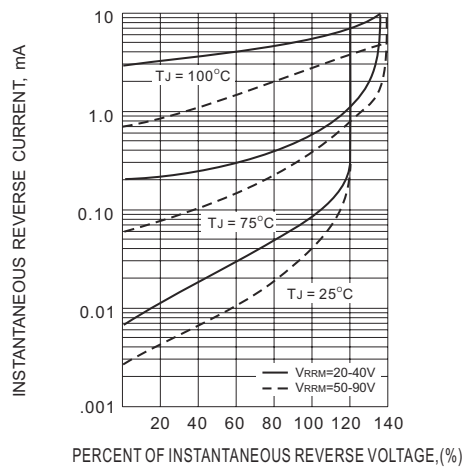


Fig.3- TYPICAL REVERSE CHARACTERISTIC

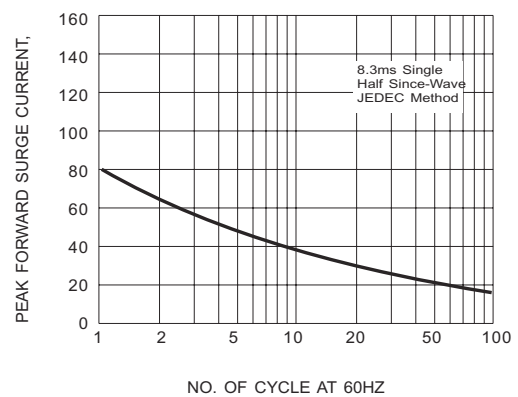


Fig.4- MAXIMUM NON - REPETITIVE SURGE CURRENT