# SR320 THRU SR3100

3.0 AMP SCHOTTKY BARRIER RECTIFIERS

GW

## FEATURES

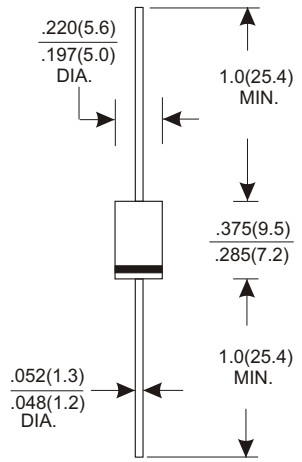
* Low forward voltage drop
* High current capability
* High reliability
* High surge current capability
* Epitaxial construction

## MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL 94V-0 rate flame retardant
* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any

VOLTAGE RANGE
20 to 100 Volts
CURRENT
3.0 Amperes

**DO-27**




Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

| TYPE NUMBER | SR320 | SR330 | SR340 | SR350 | SR360 | SR380 | SR3100 | UNITS |
|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | 14 | 21 | 28 | 35 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | 20 | 30 | 40 | 50 | 60 | 80 | 100 | V |
| Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length at $T_L$=100℃ | 3.0 | | | | | | | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | 80 | | | | | | | A |
| Maximum Instantaneous Forward Voltage at 3.0A | 0.55 | | | 0.70 | | 0.85 | | V |
| Maximum DC Reverse Current Ta=25℃ | 0.5 | | | | | | | mA |
| at Rated DC Blocking Voltage Ta=100℃ | 20 | | | | | | | mA |
| Typical Junction Capacitance (Note1) | 250 | | | | | | | pF |
| Typical Thermal Resistance $R\theta JL$ (Note 2) | 20 | | | 10 | | | | ℃/W |
| Operating Temperature Range $T_J$ | -65 — +150 | | | | | | | ℃ |
| Storage Temperature Range $T_{STG}$ | -65 — +150 | | | | | | | ℃ |

**NOTES:**

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Lead Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

## RATING AND CHARACTERISTIC CURVES (SR320 THRU SR3100)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

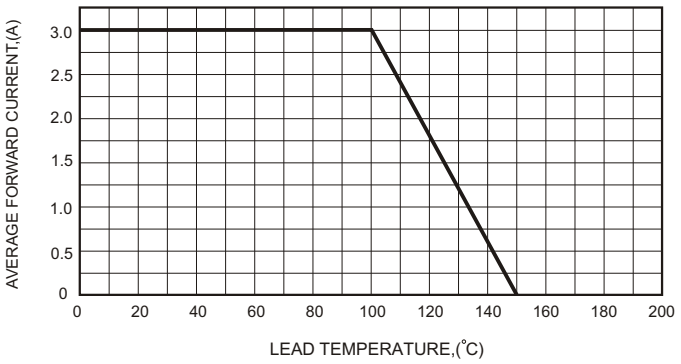



FIG.2-TYPICAL FORWARD CHARACTERISTICS

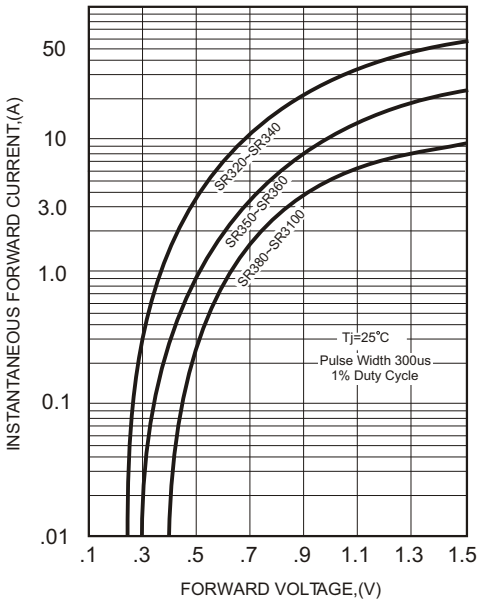



FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

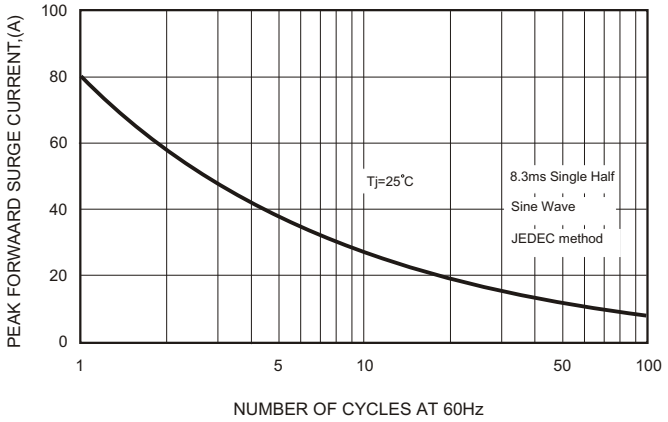



FIG.4-TYPICAL JUNCTION CAPACITANCE

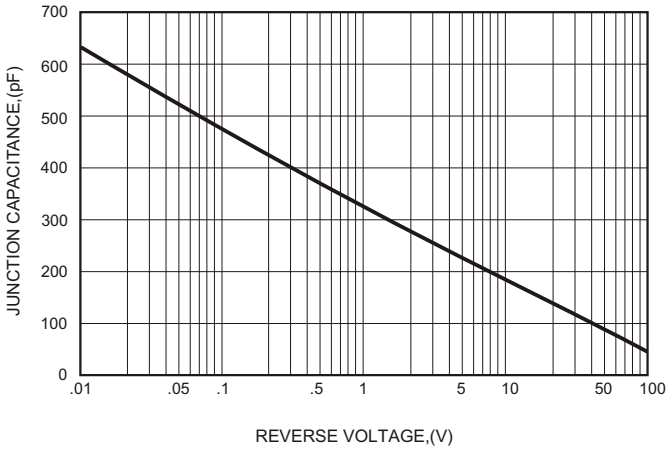



FIG.5 - TYPICAL REVERSE CHARACTERISTICS