# SR302~SR3010

## SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 100 Volt **CURRENT** 3 Amper

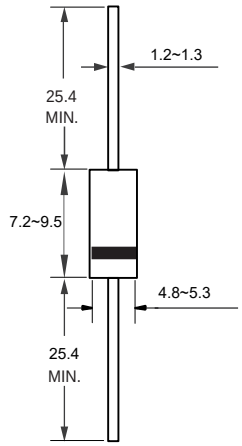
### FEATURES

- Low Forward Drop
- High Surge Current Capacity
- Guard Ring for Transient Protection
- Low Power Loss, High Efficiency
- Lead free in compliance with EU RoHS

### MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0

**DO-201AD** Unit:mm




### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

| PARAMETER | SYMBOL | SR302 | SR303 | SR304 | SR305 | SR305 | SR308 | SR3010 | UNITS |
|---|---|---|---|---|---|---|---|---|---|
| Maximum Recurrent Peak Reverse Voltage | $V_{RRM}$ | 20 | 30 | 40 | 60 | 60 | 80 | 100 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 14 | 21 | 28 | 42 | 42 | 56 | 70 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 20 | 30 | 40 | 60 | 60 | 80 | 100 | V |
| Maximum Average Forward Current (See Figure 1) | $I_{F(AV)}$ | 3 | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | $I_{FSM}$ | 80 | | | | | | | A |
| Maximum Forward Voltage at 3.0 A | $V_F$ | 0.55 | | | 0.72 | | 0.85 | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$ | 1.0 | | | | | | | mA |
| Thermal Resistance (Note2) | $R_{\theta JA}$ | 20 | | | | | | | °C / W |
| Typical Junction Capacitance (Note1) | $C_J$ | 300 | | | | | | | pF |
| Operating Junction Temperature Range | $T_J$ | -55 to +150 | | | | | | | °C |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | °C |

NOTES:
1. Measured at 1.0MHz and applied reverse voltage of 4.0 volt
2. Thermal Resistance from Junction to Ambient Vertical PC Board Mounting, 1.27mm Lead Length.

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## RATING AND CHARACTERISTIC CURVES

FIG.1 - FORWARD CURRENT DERATING CURVE

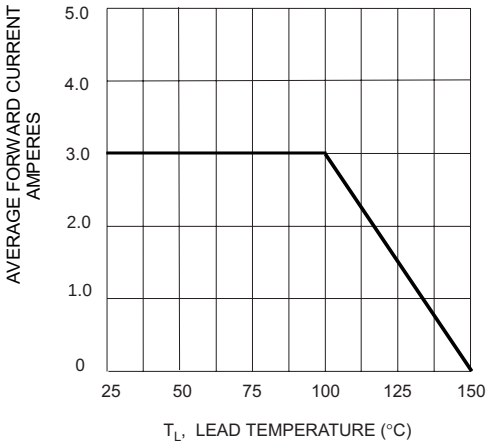



FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

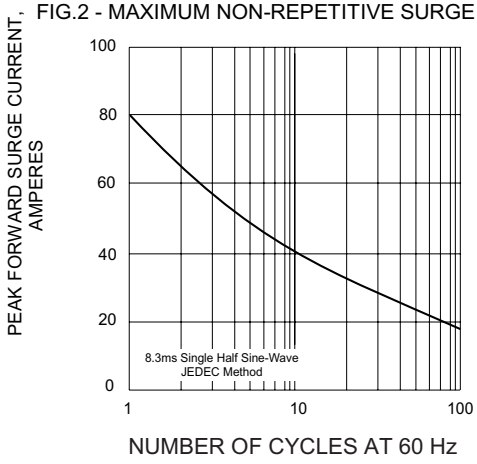



FIG.3 - TYPICAL FORWARD CHARACTERISTICS

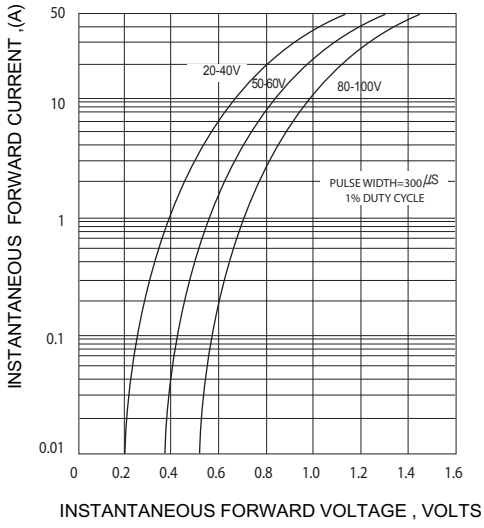
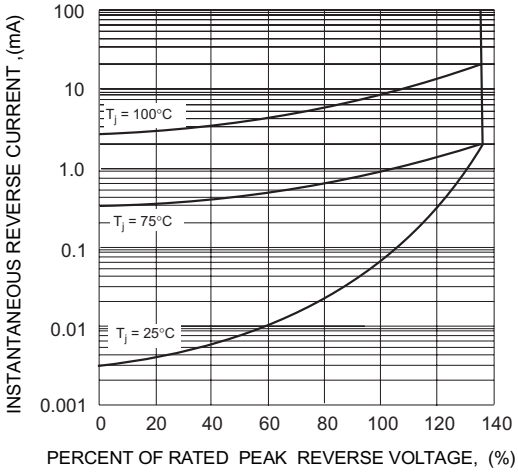



FIG.4 - TYPICAL REVERSE CHARACTERISTICS



## ORDER INFORMATION

- Packing information

| Part Number | Case | Reel Size | QUANTITY |
|---|---|---|---|
| SR302~SR3010 | DO-201AD | 13 Inch | 1200 |