



# Schottky Barrier Rectifier

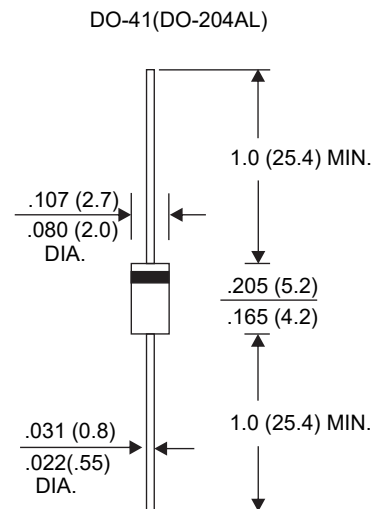
## SR140 THRU SR1200 40 to 200 V 1.0A

### FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Fast Recovery times for high efficiency
- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O
- High temperature soldering : 260°C /10 seconds at terminals

### MECHANICAL DATA

- Case: Molded plastic, DO-41and DO-204AL
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number



Dimensions in inches and (millimeters)

### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.

| Type Number and marks                                                                                                    | Symbols          | SR 140      | SR 145 | SR 160 | SR 180 | SR 1100 | SR 1120 | SR 1150 | SR 1200 | Units |
|--------------------------------------------------------------------------------------------------------------------------|------------------|-------------|--------|--------|--------|---------|---------|---------|---------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                                                   | V <sub>RRM</sub> | 40          | 45     | 60     | 80     | 100     | 120     | 150     | 200     | Volts |
| Maximum RMS Voltage                                                                                                      | V <sub>RMS</sub> | 28          | 31.5   | 42     | 56     | 70      | 84      | 105     | 140     | Volts |
| Maximum DC Blocking Voltage                                                                                              | V <sub>DC</sub>  | 40          | 45     | 60     | 80     | 100     | 120     | 150     | 200     | Volts |
| Maximum Average Forward Rectified Current.<br>Lead Length @Ta(Fig 1)                                                     | I <sub>AV</sub>  | 1.0         |        |        |        |         |         |         |         | Amp   |
| Peak Forward Surge Current, 8.3 ms single half-sine-wave superimposed on rated load (JEDEC method) (Rating of per diode) | I <sub>FSM</sub> | 28          |        |        |        |         |         |         |         | Amp   |
| Maximum instantaneous forward voltage at I <sub>AV</sub>                                                                 | V <sub>F</sub>   | 0.55        | 0.70   |        | 0.85   |         | 0.90    |         | 0.95    | Volts |
| Maximum DC reverse current at rated<br>DC blocking voltage per<br>T <sub>j</sub> =25°C<br>T <sub>j</sub> =100°C          | I <sub>R</sub>   | 0.2         |        |        | 0.1    |         |         |         |         | mA    |
|                                                                                                                          |                  | 20          |        |        | 6      |         |         |         |         |       |
| Typical Thermal Resistance                                                                                               | R <sub>θJA</sub> | 50          |        |        |        |         |         |         |         | °C/W  |
| Junction Temperature                                                                                                     | T <sub>J</sub>   | -65 to +150 |        |        |        |         |         |         |         | °C    |
| Storage Temperature Range                                                                                                | T <sub>STG</sub> | -65 to +150 |        |        |        |         |         |         |         | °C    |

### Ordering Information (Example)

| Prefered P/N | Package code | Unit weight(g) | Minimum Package(pcs) | Inner box Quantity(pcs) | Outer carton quantity(pcs) | Delivery mode |
|--------------|--------------|----------------|----------------------|-------------------------|----------------------------|---------------|
| DO-41        | T1           | about 0.27     | 5000                 | 5000                    | 50000                      | Tape          |
| DO-204AL     | B1           | about 0.27     | 1000                 | 1000                    | 30000                      | Bulk          |
| A-045        | B2           | about 0.27     | 500                  | 500                     | 20000                      | Bulk          |



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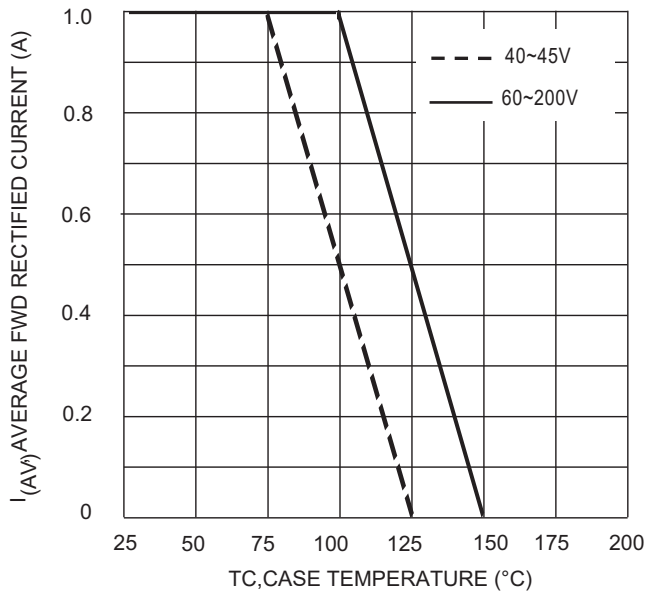


Fig. 1 Forward Derating Curve

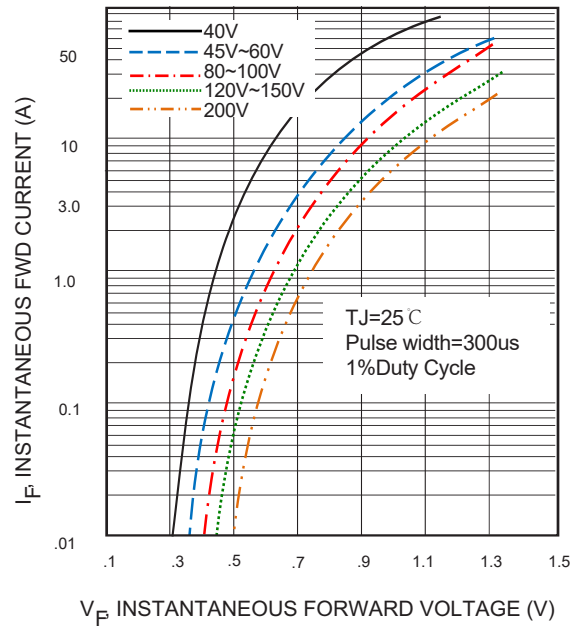


Fig. 2 Typical Forward Characteristics

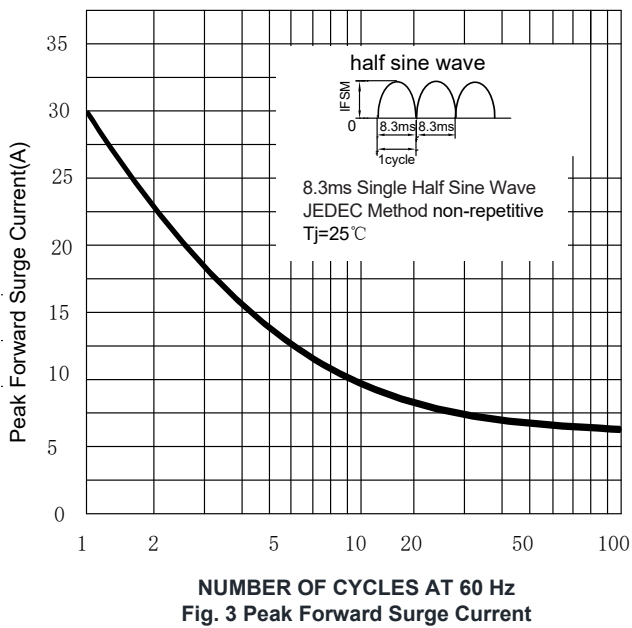


Fig. 3 Peak Forward Surge Current

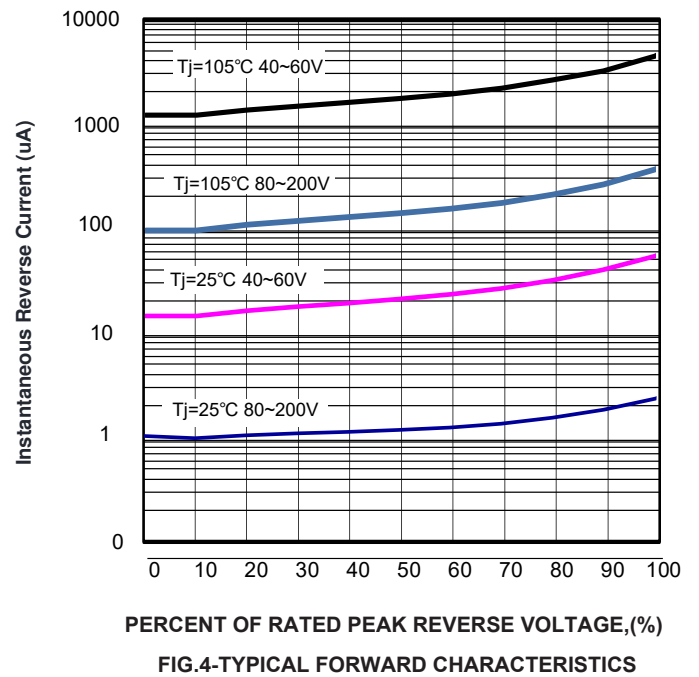


FIG.4-TYPICAL FORWARD CHARACTERISTICS