



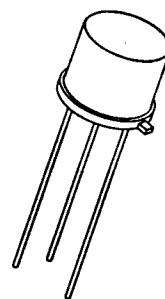
PRELIMINARY

**SOLID STATE DEVICES, INC**14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424**SSR1645/5****Designer's Data Sheet****FEATURES:**

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Hermetically Sealed Package
- Available in isolated and non-isolated versions
- Eutectic Die Attach
- 175°C Operating Temperature
- TX, TXV and Space Level Screening Available

**10 AMP  
45 VOLTS  
SCHOTTKY  
RECTIFIER**

TO-5

**MAXIMUM RATINGS**

| RATING                                                                                                                                  | SYMBOL             | VALUE       | UNIT  |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------|-------|
| Peak Repetitive Reverse<br>and DC Blocking Voltage                                                                                      | VRRM<br>VRWM<br>VR | 45          | Volts |
| Average Rectified Forward Current<br>(Resistive Load, 60Hz, Sine Wave, TA=25°C)                                                         | Io                 | 10          | Amps  |
| Peak Surge Current<br>(8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow<br>junction to reach equilibrium between pulses, TA=25°C) | IFSM               | 200         | Amps  |
| Operating and storage temperature                                                                                                       | Top & Tstg         | -65 to +175 | °C    |
| Maximum Thermal Resistance<br>Junction to Case                                                                                          | RθJC               | 7           | °C/W  |

NOTE: All specifications are subject to change without notification.  
SCD's for these devices should be reviewed by SSDI prior to release.**DATA SHEET#: RS0007 B****MED**

# SSR1645/5

PRELIMINARY

# SSDI

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

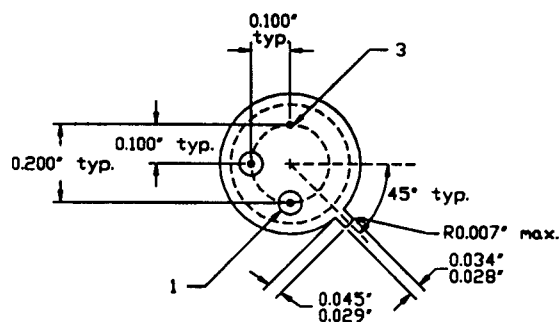
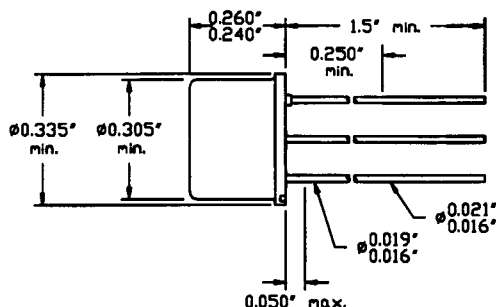
## ELECTRICAL CHARACTERISTICS

| CHARACTERISTICS                                                                                                                                              | SYMBOL | MAXIMUM              | UNIT |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------------------|------|
| <b>Instantaneous Forward Voltage Drop</b><br>(IF = 3 Adc, TA=25°C, 300μs Pulse)<br>(IF = 5 Adc, TA=25°C, 300μs Pulse)<br>(IF = 10 Adc, TA=25°C, 300μs Pulse) | VF1    | 0.50<br>0.55<br>0.70 | Vdc  |
| <b>Instantaneous Forward Voltage Drop</b><br>(IF = 5 Adc, TA= - 55°C, 300μs Pulse)                                                                           | VF2    | 0.62                 | Vdc  |
| <b>Reverse Leakage Current</b><br>(Rated VR, TA=25°C, 300μs pulse minimum)                                                                                   | IR1    | 200                  | μA   |
| <b>Reverse Leakage Current</b><br>(Rated VR, TA=100°C, 300μs pulse minimum)                                                                                  | IR2    | 15                   | mA   |
| <b>Junction Capacitance</b><br>(VR = 10 Vdc, TA=25°C, f= 1 MHz )                                                                                             | CJ     | 800                  | pf   |

## CASE OUTLINE: TO-5

### PIN OUT:

PIN 1: ANODE  
PIN 2: ANODE  
PIN 3: CATHODE



## TYPICAL OPERATING CURVES

(TA=25°C unless otherwise specified)

