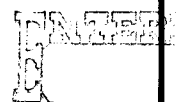


**SPD0801  
thru  
SPD1001**



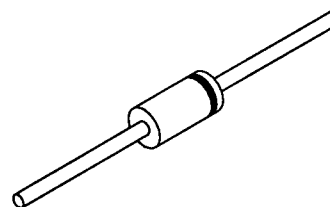
## Designer's Data Sheet

### FEATURES:

- PIV to 100 Volts
- Extremely Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Capacity
- High Voltage Replacement for:
- 1N5817-1N5819 Series
- Surface mount versions available
- TX, TXV and Space Level Screening Available

**1 AMP  
80-100 VOLTS  
SCHOTTKY  
RECTIFIER**

AXIAL



### MAXIMUM RATINGS

| RATING                                                                                                                                  | SYMBOL                     | VALUE           | UNIT  |
|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------------|-------|
| Peak Repetitive Reverse<br>and DC Blocking Voltage<br><br>SPD0801<br>SPD0901<br>SPD1001                                                 | VRRM<br><br>VRWM<br><br>VR | 80<br>90<br>100 | Volts |
| Average Rectified Forward Current<br>(Resistive Load, 60Hz, Sine Wave, TA=25°C)                                                         | IO                         | 1               | 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                       | 40              | Amps  |
| Operating and storage temperature                                                                                                       | Top & Tstg                 | -55 to +125     | °C    |
| Maximum Thermal Resistance<br>Junction to Lead, L=3/8"                                                                                  | RθJL                       | 46              | °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#: RS0115 B

RMD

# SPD0801 thru SPD1001

PRELIMINARY



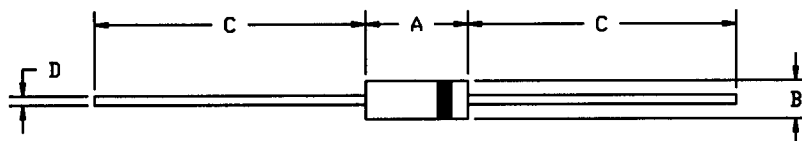
**SOLID STATE DEVICES, INC**

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>( $I_F = 0.5 \text{ A}$ dc, $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)<br>( $I_F = 1 \text{ A}$ dc, $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse) | <b>V<sub>F</sub></b> | 0.75<br>0.95 | Vdc           |
| <b>Instantaneous Forward Voltage Drop</b><br>( $I_F = 1 \text{ A}$ dc, $T_A = -55^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)                                                                                   | <b>V<sub>F</sub></b> | 1.0          | Vdc           |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)                                                                                                  | <b>I<sub>R</sub></b> | 200          | $\mu\text{A}$ |
| <b>Reverse Leakage Current</b><br>(Rated $V_R$ , $T_A = 100^\circ\text{C}$ , 300 $\mu\text{s}$ pulse minimum)                                                                                                 | <b>I<sub>R</sub></b> | 10           | mA            |
| <b>Junction Capacitance</b><br>( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$ )                                                                                                    | <b>C<sub>J</sub></b> | 30           | pf            |

## CASE OUTLINE:



NOTE: Lead diameter is not controlled within .050" of the diode body.

## DIMENSIONS

| DIM      | MIN.  | MAX.  |
|----------|-------|-------|
| <b>A</b> | .160" | .205" |
| <b>B</b> | .080" | .107" |
| <b>C</b> | 1.00" | ---   |
| <b>D</b> | .028" | .032" |

## TYPICAL OPERATING CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise specified)

