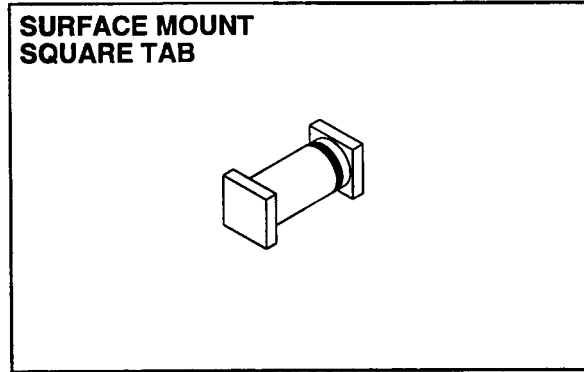


**SPD0801SMS
thru
SPD1001SMS**

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
 - Axial Lead versions available
 - TX, TXV and Space Level Screening Available

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



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SPD0801SM SPD0901SM SPD1001SM	VRRM VRWM VR	 80 90 100	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	1	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, allow 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 Junction to End Tab	RθJE	20	°C/W

**SPD0801SMS
thru
SPD1001SMS**

PRELIMINARY



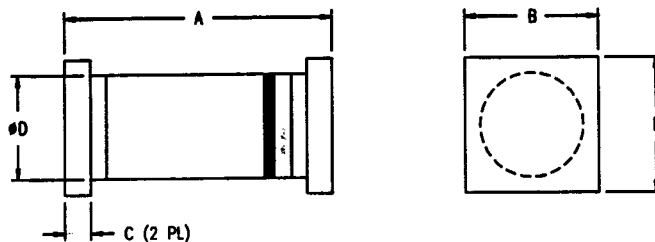
SOLID STATE DEVICES, INC.

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

ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 0.5 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 1 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	V_F	0.75 0.95	Vdc
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	V_F	1.0	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	I_R	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	I_R	10	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	C_J	30	pf

CASE OUTLINE:



DIMENSIONS

DIM	MIN.	MAX.
A	.180"	.235"
B	.125"	.135"
C	.022"	.028"
D	.090	.110

NOTE: Dimensions are prior to solder dipping.

TYPICAL OPERATING CURVES

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

