PRELIMINARY

SPD0801SMS thru SPD1001SMS

SOLID STATE DEVICES, INC

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

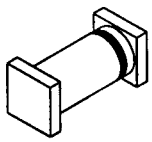
Designer's Data Sheet

1 AMP 80-100 VOLTS SCHOTTKY RECTIFIER

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

SURFACE MOUNT
SQUARE TAB



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage **SPD0801SM** **SPD0901SM** **SPD1001SM**	V_{RRM} V_{RWM} V_R	80 90 100	**Volts**
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	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)	I_{FSM}	40	**Amps**
Operating and storage temperature	T_{op} & T_{stg}	-55 to +125	°C
Maximum Thermal Resistance Junction to End Tab	$R_{\theta JE}$	20	°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#: RS0117 C

RMD

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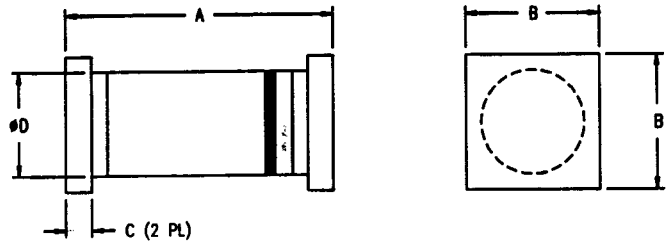
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (I_F = 0.5 Adc, T_A=25°C, 300µs Pulse) (I_F = 1 Adc, T_A=25°C, 300µs Pulse)	V_F	0.75 0.95	Vdc
Instantaneous Forward Voltage Drop (I_F = 1 Adc, T_A= - 55°C, 300µs Pulse)	V_F	1.0	Vdc
Reverse Leakage Current (Rated VR, T_A=25°C, 300µs pulse minimum)	I_R	200	µA
Reverse Leakage Current (Rated V_R, T_A=100°C, 300µs pulse minimum)	I_R	10	mA
Junction Capacitance (V_R = 10 Vdc, T_A=25°C, f= 1 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

(TA=25°C unless otherwise specified)

