



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SPD0801 – SPD1001SMS
 and
 SPD0801SMS - SPD1001SMS**

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

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SPD ___ ___ ___

 |
 | L **Screening^{2/}**
 | TX = TX Level
 | TXV = TXV Level,
 | S = S-Level
 | ___ = Not Screened
 |
 | **Package**
 | ___ = Axial Leaded
 | SMS = Surface Mount Square Tab

Voltage / Family 0801 = 80V
 0901 = 90V
 1001 = 100V

- FEATURES:**
- Extremely Low Forward Voltage Drop
 - High Surge Capability
 - PIV to 100 Volts
 - Low Reverse Leakage Current
 - High Voltage Replacement for 1N5817-1N5819 Series
 - Surface Mount Versions Available
 - TX, TXV, and Space Level Screening Available^{2/}

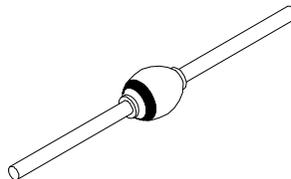
MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SPD0801SMS	V_{RRM}	80	Volts
	SPD0901SMS	V_{RWM}	90	
	SPD1001SMS	V_R	100	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A=25^\circ\text{C}$)		I_O	1	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_O , allow junction to reach equilibrium between pulses, $T_A=25^\circ\text{C}$)		I_{FSM}	40	Amps
Operating and Storage Temperature		$T_{OP} \ \& \ T_{stg}$	-55 to +125	$^\circ\text{C}$
Maximum Thermal Resistance	Junction to Lead, L=3/8"	$R_{\theta JL}$	46	$^\circ\text{C/W}$
	Junction to End	$R_{\theta JE}$	20	

NOTES:

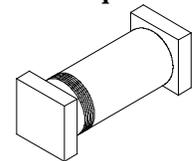
^{1/} For ordering information, price, and availability, contact factory.

^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.

Axial Leaded



Surface Mount Square Tab (SMS)





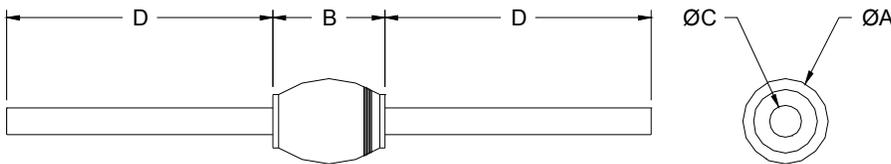
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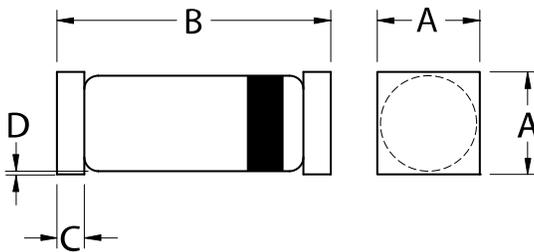
ELECTRICAL CHARACTERISTICS	Symbol	Max	Unit
Instantaneous Forward Voltage Drop ($I_F = 0.5A_{DC}$, $T_A = 25^\circ C$, 300 μs Pulse) ($I_F = 1A_{DC}$, $T_A = 25^\circ C$, 300 μs Pulse)	V_F	0.75 0.95	Vdc
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}$, $T_A = -55^\circ C$, 300 μs Pulse)	V_F	1.0	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ C$, 300 μs minimum Pulse)	I_R	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μs minimum Pulse)	I_R	10	mA
Junction Capacitance ($V_R = 10 V_{DC}$, $T_A = 25^\circ C$, $f = 1 MHz$)	C_J	30	pF

Case Outline: (Axial)



DIMENSIONS		
DIM	MIN	MAX
A	.080"	.107"
B	.160"	.205"
C	.028"	.032"
D	1.00"	---

Case Outline: (SMS)



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

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET #: RS0115B

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