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Designer's Data Sheet

Part Number / Ordering Information^{1/}

SPD

L Screening^{2/} = Not Screened TX = TX Level TXV = TXV Level S = S-Level Package = Axial Leaded SMS = Surface Mount Square Tab Voltage / Family 0801 = 80V 0901 = 90V 1001 = 100V

SPD0801 - SPD1001SMS and SPD0801SMS - SPD1001SMS

1 AMP SCHOTTKY RECTIFIER 80-100 VOLTS

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 VoltageSPD0801 SPD0901 SPD1001		V _{RRM} V _{RWM} V _R	80 90 100	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, T _A =25 [°] C)		lo	1	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_0 , allow junction to reach equilibrium between pulses, $T_A=25$ °C)		I _{FSM}	40	Amps
Operating and Storage Temperature		T _{OP} & Tstg	-55 to +125	°C
Maximum Thermal Resistance	Junction to Lead, L=3/8 Junction to End		46 20	°C/W

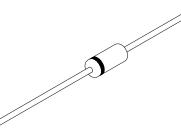
NOTES:

<u>1</u>/ 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)





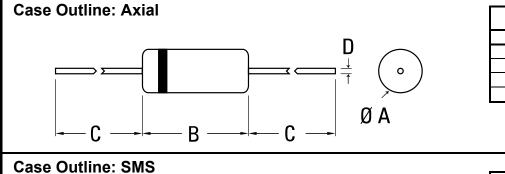
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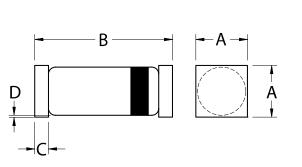
Solid State Devices, Inc.

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SPD0801 – SPD1001SMS and SPD0801SMS - SPD1001SMS

	Currench o l	Max	
ELECTRICAL CHARACTERISTICS	Symbol	Max	Unit
Instantaneous Forward Voltage Drop ($I_F = 0.5A_{DC}, T_A = 25^{\circ}C, 300 \ \mu s Pulse$) ($I_F = 1A_{DC}, T_A = 25^{\circ}C, 300 \ \mu s Pulse$)	V _F	0.75 0.95	Vdc
Instantaneous Forward Voltage Drop ($I_F = 1A_{DC}, T_A = -55^{\circ}C, 300 \ \mu s Pulse$)	V _F	1.0	Vdc
Reverse Leakage Current (Rated V _R , T _A = 25 [°] C, 300 μ s minimum Pulse)	I _R	200	μA
Reverse Leakage Current (Rated V _R , T _A = 100 °C, 300 μs minimum Pulse)	I _R	10	mA
Junction Capacitance ($V_R = 10 V_{DC}$, $T_A = 25^{\circ}C$, f = 1 MHz)	С	30	pF





DIMENSIONS				
DIM	MIN	MAX		
Α	.080"	.107"		
В	.160"	.205"		
C	1.00"			
D	.028"	.032"		

DIMENSIONS				
DIM	MIN	MAX		
Α	.125"	.135"		
В	.180"	.235"		
С	.022"	.028"		
D	.090"	.110"		