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

SPD1502 thru SPD2002 Series

Designer's Data Sheet

Part Number/Ordering Information [1/]

SPD ___ ___ ___

Screening [2/]
__ = Not Screened
TX = TX Level
TXV = TXV
S = S Level

Package Type
__ = Axial Leaded
SM = Surface Mount Round Tab
SMS = Surface Mount Square Tab

Family/Voltage
1502 = 150 V
2002 = 200 V

2 AMP 150 - 200 VOLTS SCHOTTKY RECTIFIER

Features:
- PIV to 200 Volts
- Extremely Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Capacity
- Possible Replacement for 1N5802 - 1N5806 Series
- Hermetically Sealed
- For low voltage versions, see data sheet RS0006
- TX, TXV, and Space Level Screening Available[2/]
- Category III metallurgical bond per MIL-PRF-19500 appendix A

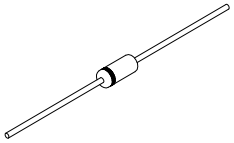
Maximum Ratings		Symbol	Value	Units
Reverse Voltage	**SPD1502** **SPD2002**	V_{RRM} V_{RWM} V_R	150 200	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, T_L or T_E = 55°C)		I_O	2	Amps
Peak Surge Current (8.3 ms Pulse, allow junction to reach equilibrium between pulses, TA = 25°C)		I_{FSM}	40	Amps
Operating and Storage Temperature Range		T_{OP} & T_{STG}	-55 to +150	°C
Maximum Thermal Resistance Junction to Lead, L = .25" (Axial Lead) Junction to End Tab (Surface Mount)		$R_{\Theta JL}$ $R_{\Theta JE}$	70 50	°C/W

NOTES:

1/ For ordering information, price, and availability- Contact factory.

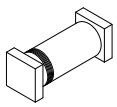
2/ Screening based on MIL-PRF-19500. Screening flows available on request.

Axial Lead



Surface Mount Round Tab

Surface Mount Square Tab



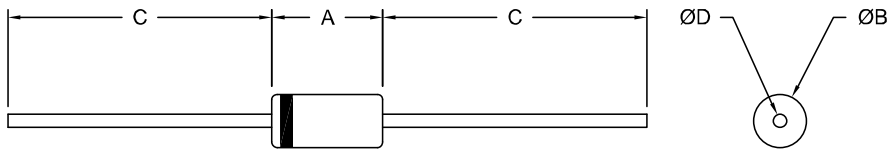
Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SPD1502 thru SPD2002 Series

Electrical Characteristic		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T_J = 25ºC, 300 - 500 µsec pulse)	I_F = 0.5A	V_{F1}	---	**0.78**	**Volts**
	I_F = 1A	V_{F2}	---	**0.85**	
	I_F = 2A	V_{F3}	---	**0.95**	
Instantaneous Forward Voltage Drop (I_F = 1A, 300 - 500 µsec pulse)	T_A = -55ºC	V_{F4}	---	**1.10**	**Volts**
	T_A = 100ºC	V_{F5}	---	**0.78**	
Reverse Leakage Current (V_R = Rated V_R, T_A = 25ºC, 300 µsec min pulse)		I_{R1}	---	**100**	**µA**
Reverse Leakage Current (V_R = Rated V_R, T_A = 100ºC, 300 µsec min pulse)		I_{R2}	---	**2**	**mA**
Junction Capacitance (V_R=10 Vdc, T_A=25ºC, f=1MHz)		C_J	---	**40**	**pF**

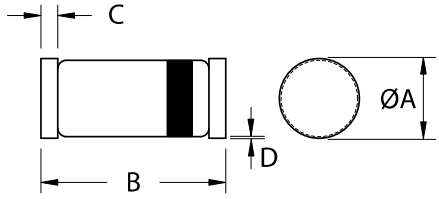
Consult manufacturing for operating curves

CASE OUTLINE: Axial Lead



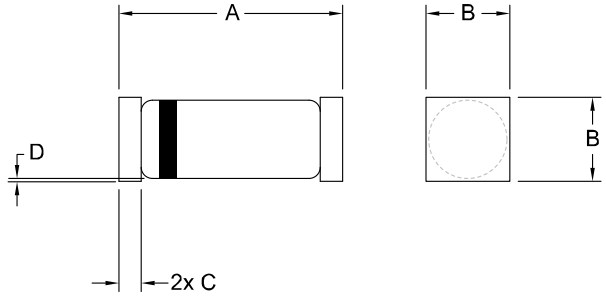
DIMENSIONS		
DIM	MIN	MAX
A	0.155”	0.185”
B	0.080”	0.107”
C	1.00”	--
D	0.028”	0.032”

CASE OUTLINE: Surface Mount Round Tab (SM)



DIMENSIONS		
DIM	MIN	MAX
A	0.095”	0.105”
B	0.190”	0.210”
C	0.015”	0.025”
D	0.002”	--

CASE OUTLINE: Surface Mount Square Tab (SMS)



DIMENSIONS		
DIM	MIN	MAX
A	0.200”	0.235”
B	0.125”	0.135”
C	0.020”	0.030”
D	0.002”	--

Dimensions prior to solder dip