



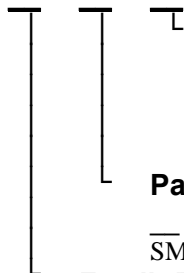
Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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ssdi@ssdi-power.com * www.ssdi-power.com

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
SMS = Surface Mount Square Tab

Family/Voltage

0802 = 80 V
0902 = 90 V
1002 = 100 V

SPD0802 and SMS thru SPD1002 and SMS

2 AMP 80 - 100 VOLTS SCHOTTKY RECTIFIER

Features:

- PIV to 100 Volts
- Extremely Low Forward Voltage Drop
- Low Reverse Leakage Current
- High Surge Capacity
- HV/Replacement for 1N5817 - 1N5819 Series
- Hermetically Sealed
- TX, TXV, and Space Level Screening Available ^{2/}
- Category III metallurgical bond per MIL PRF 19500 appendix A

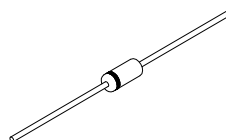
Maximum Ratings		Symbol	Value	Units
Reverse Voltage	SPD0802 & SMS	VRRM	80	Volts
	SPD0902 & SMS	VRWM	90	
	SPD1002 & SMS	VR	100	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, T _L or T _E = 55 °C)		I _o	2	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I _o , allow junction to reach equilibrium between pulses, T _A = 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 _{θJL} R _{θJE}	70 50	°C/W

NOTES:

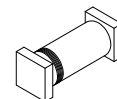
^{1/} For Ordering Information, Price, and Availability- Contact Factory.

^{2/} Screening Based on MIL-PRF-19500. Screening Flows Available on Request.

Axial Lead



Surface Mount
Square Tab



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

DATA SHEET #: RS0006F

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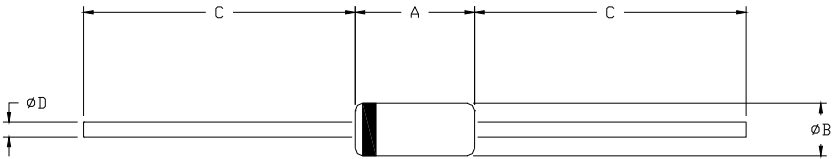
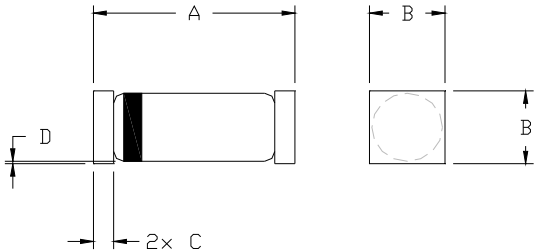
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**SPD0802 and SMS
 thru
 SPD1002 and SMS**

Electrical Characteristic		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (Tj = 25°C, 300 - 500 µsec pulse)	If = 0.5A	Vf1	---	0.73	Volts
	If = 1A	Vf2	---	0.85	
	If = 2A	Vf3	---	0.95	
Instantaneous Forward Voltage Drop (If = 1A, 300 - 500 µsec pulse)	TA = -55°C	Vf4	---	0.88	Volts
	TA = 100°C	Vf5	---	0.78	
Reverse Leakage Current (Vr = Rated Vr, TA = 25°C, 300 µsec min pulse)		Ir1	---	100	µA
Reverse Leakage Current (Vr = Rated Vr, TA = 100°C, 300 µsec min pulse)		Ir2	---	2	mA
Junction Capacitance (Vr=10 Vdc, TA=25°C, f=1MHz)		Cj	---	40	pF

Consult manufacturing for operating curves

	DIMENSIONS		
	DIM	MIN	MAX
	A	0.155"	0.185"
	B	0.080"	0.107"
	C	1.00"	--
	D	.028"	0.32"
	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

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