

**Solid State Devices, Inc.**

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
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**Designer's Data Sheet****Part Number/Ordering Information ^{1/}**

SPD3126 _ _ _

L Screening ^{2/}

_ = Not Screened
 TX = TX Level
 TXV = TXV
 S = S Level

L Package Type

_ = Axial Leaded
 SMS = Surface Mount Square Tab

Recovery Time ^{4/}

_ = Standard Recovery (5000 ns)
 F = Fast (250 ns)
 UF = Ultrafast (70 ns)

SPD3126 Series**HIGH VOLTAGE****1.0 AMP****2.5 kV MIN**

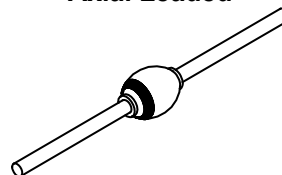
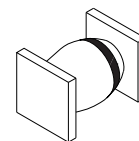
**Standard/ Fast / UltraFast Recovery
 Rectifier**

FEATURES:

- PIV 2.5 kV MIN
- Hermetically Sealed
- Single Chip Construction
- For High Voltage Applications
- Available in Axial & Square Tab Versions
- TX, TXV, and S-Level Screening Available ^{2/}
- Replacement for High Voltage Multijunction Devices

MAXIMUM RATINGS ^{3/}

MAXIMUM RATINGS ^{3/}		Recovery Time			
RATING	SYMBOL	Std	Fast	UF	UNIT
Peak Repetitive Reverse Voltage And DC Blocking Voltage	SPD3126 V_{RRM} V_R	2500	2500	2500	Volts
Average Rectified Forward Current (L = 1/8", Resistive Load, 60Hz, Sine Wave, T _A = 25°C)	I_O	1.0	0.8	0.7	Amps
Peak Surge Current (8.3ms pulse, half sine wave superimposed on I _o , allow junction to reach equilibrium between pulses, T _A = 25°C)	I_{FSM}	40	28	20	Amps
Operating & Storage Temperature	T_J and T_{STG}	-65 to +175			°C
Thermal Resistance	Junction to Lead for Axial, L =.375"	38			°C/W
	Junction to End Tab for Surface Mount	25			

NOTES:**1/** For Ordering Information, Price, Operating Curves, and Availability- Contact Factory.**2/** Screening Based on MIL-PRF-19500. Screening Flows Available on Request.**3/** Unless Otherwise Specified, All Electrical Characteristics @25°C.**4/** I_F = 500mA, I_R = 1A, I_{RR} = 250mA, T_A = 25°C**Axial Leaded****SMS**

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

DATA SHEET #: RC0110B**DOC**

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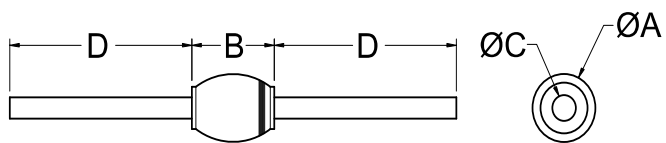
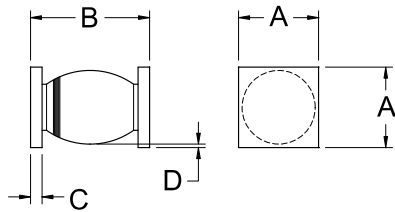
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SPD3126 and SPD3126SMS

ELECTRICAL CHARACTERISTICS ^{3/}			Recovery Time			UNIT
CHARACTERISTICS	SYMBOL		Std	Fast	uf	
Maximum Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, pulsed)	$I_F = 0.5 \text{ Adc}$ $I_F = 1.0 \text{ Adc}$	V_{F1} V_{F2}	1.9 2.1	3.6 4.8	5.2 6.8	Vdc
Maximum Reverse Leakage Current ($V_R = 2.2\text{kV}$)	($T_A = +25^\circ\text{C}$) ($T_A = +100^\circ\text{C}$)	I_{R1} I_{R2}	1.0 100	2.0 150	4.0 300	μA μA
Maximum Junction Capacitance $f = 1\text{MHz}$, $T_A = 25^\circ\text{C}$	$V_R = 10\text{V}$ $V_F = 100\text{V}$	C_J	12 8	12 8	12 8	pF
Maximum Reverse Recovery Time $I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$		t_{rr}	5000	250	70	ns
Minimum Breakdown Voltage ($I_R = 50\mu\text{A}$)		B_{VR}	2.5	2.5	2.5	kV

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DIMENSIONS (inches)			DIMENSIONS (inches)		
DIM.	Minimum	Maximum	DIM.	Minimum	Maximum
A	.110	.132	A	.134	.140
B	.150	.170	B	.200	.225
C	.027	.033	C	.022	.028
D	1.00	---	D	.001	---
AXIAL 			SMS 		

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