



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

**SDAH2500F
 thru
 SDAH25000F**

**1 AMP
 FAST RECOVERY
 RECTIFIER ASSEMBLY
 2.5kV thru 25kV**

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SDAH **F**

┌ **Screening ^{2/}**
 └ = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

Reverse Recovery Time
 F = Fast Recovery

Voltage/Family
 2500 = 2500V 12500 = 12500V
 5000 = 5000V 15000 = 15000V
 7500 = 7500V 20000 = 20000V
 10000 = 10000V 25000 = 25000V

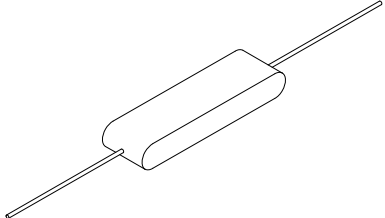
- FEATURES:**
- Average output current: 1 Amp
 - 2500 to 25000V blocking voltage
 - Fast recovery: 150 nsec maximum
 - Low reverse leakage current
 - Corona free construction
 - Glass passivated rectifiers
 - Hermetically sealed discretes
 - Superior thermal shock resistance
 - Ultra fast and hyper fast versions available – consult factory
 - Higher current versions available – consult factory
 - TX, TXV and Space level screening available ^{2/}

MAXIMUM RATINGS ^{3/}

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage And DC Blocking Voltage	SDAH2500F	2500	Volts
	SDAH5000F	5000	
	SDAH7500F	7500	
	SDAH10000F	10000	
	SDAH12500F	12500	
	SDAH15000F	15000	
	SDAH20000F	20000	
	SDAH25000F	25000	
	Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, No Heatsink)	$T_C = 25^\circ C$	
$T_C = 100^\circ C$		0.66	
Peak Surge Current (8.3 msec pulse, Half Sine Wave)	$T_C = 25^\circ C$	50	Amps
	$T_C = 100^\circ C$	25	
Operating & Storage Temperature	T_{OP} and T_{STG}	-55 to +150	°C

- 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.

HV STICK





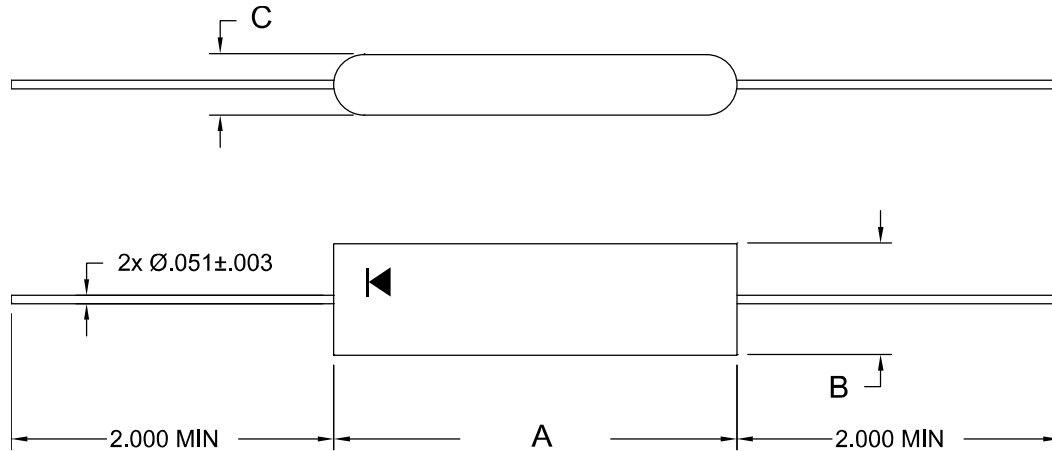
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ELECTRICAL CHARACTERISTICS ^{3/}		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1A, 300 - 500\mu s$ Pulse)	SDAH2500F	V_{F1}	5.2	Vdc
	SDAH5000F		9.0	
	SDAH7500F		14.5	
	SDAH10000F		18.0	
	SDAH12500F		22.5	
	SDAH15000F		29.0	
	SDAH20000F		36.0	
	SDAH25000F		45.0	
Reverse Leakage Current (Rated V_R , 300 μs Pulse Minimum)		I_{R1}	1	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μs Pulse Minimum)		I_{R2}	20	mA
Reverse Recovery Time ($I_F = 500mA, I_R = 1A, I_{RR} = 250mA$)		t_{rr}	150	ns

CASE OUTLINE: HV STICK



PART NUMBER	A $\pm.030$	B $\pm.020$	C $\pm.010$
SDAH2500F	1.125	0.500	0.250
SDAH5000F	1.125	0.500	0.250
SDAH7500F	1.625	0.500	0.250
SDAH10000F	2.000	0.500	0.250
SDAH12500F	2.375	0.500	0.250
SDAH15000F	2.750	0.500	0.250
SDAH20000F	3.500	0.500	0.250
SDAH25000F	4.250	0.500	0.250

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

DATA SHEET #: RA0099A

DOC