



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
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SDAH2500F thru SDAH25000F

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SDAH _ _ F _ _

L 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

1 AMP

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

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	V_{RRM} V_{RWM} V_R	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)	$T_C = 25^{\circ}C$	I_o	1	Amps
	$T_C = 100^{\circ}C$		0.66	
Peak Surge Current (8.3 msec pulse, Half Sine Wave)	$T_C = 25^{\circ}C$	I_{FSM}	50	Amps
	$T_C = 100^{\circ}C$		25	
Operating & Storage Temperature		T_{OP} and T_{STG}	-55 to +150	$^{\circ}C$

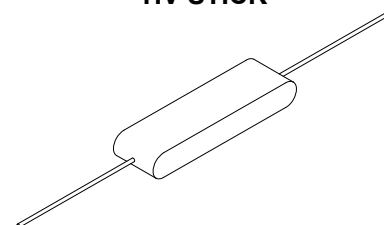
NOTES:

^{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



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

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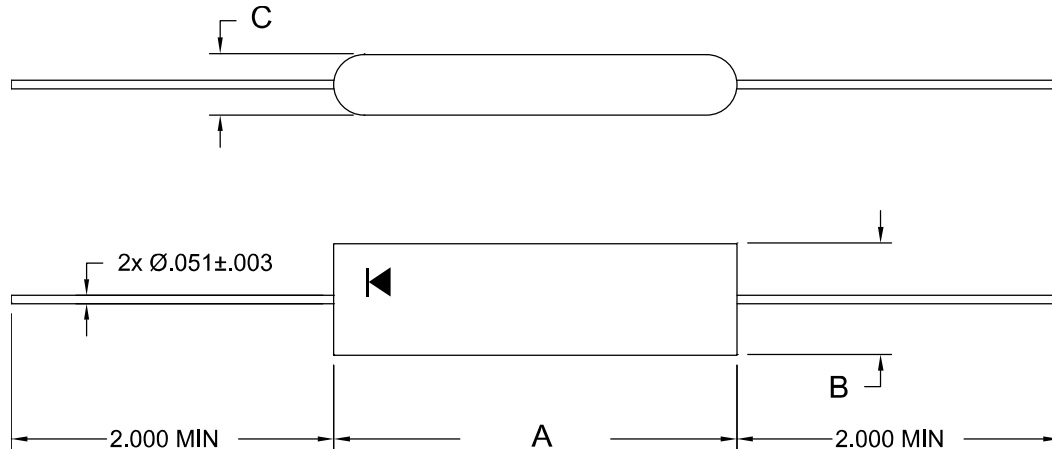
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ELECTRICAL CHARACTERISTICS ^{3/}		SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1A$, 300 - 500 μs Pulse)	SDAH2500F	V_{F1}	5.2	Vdc
	SDAH5000F		9.0	
	SDAH7500F		14.5	
	SDAH10000F		18.0	
	SDAH12500F		22.5	
	SDAH15000F		29.0	
	SDAH20000F		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 ±.030	B ±.020	C ±.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

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