



PRELIMINARY

SOLID STATE DEVICES, INC.

14830 Valley View Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773

**SDAH2500UF
thru
SDAH25000UF**

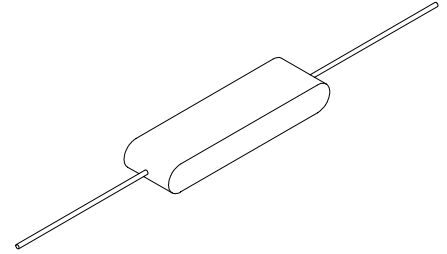
**1.1 to 2 AMPS
2.5kV thru 25kV
ULTRAFAST RECOVERY
RECTIFIER ASSEMBLY**

Designer's Data Sheet

FEATURES:

- Average Output Current 1.1 to 2 Amps
- PIV from 2500 to 25000 V
- Ultrafast Recovery: 70 nsec Maximum
- Low Reverse Leakage Current
- Corona Free Construction
- Constructed with Hermetically Sealed Discretes
- Superior Thermal Shock Resistance
- TX and TXV Level Screening Available
- Fast and Hyper Fast Recovery Versions Available. Consult Factory.

HV STICK



| Maximum Ratings | | SYMBOL | VALUE | UNITS |
|--|-------------|--|-------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage | SDAH2500UF | V _{RRM} V _{RWM} V _R | 2500 | Volts |
| | SDAH5000UF | | 5000 | |
| | SDAH7500UF | | 7500 | |
| | SDAH10000UF | | 10000 | |
| | SDAH12500UF | | 12500 | |
| | SDAH15000UF | | 15000 | |
| | SDAH20000UF | | 20000 | |
| | SDAH25000UF | | 25000 | |
| Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, T _A = 25°C ^{1/} , No Heatsink) | SDAH2500UF | I _o | 2 | Amps |
| | SDAH5000UF | | 2 | |
| | SDAH7500UF | | 2 | |
| | SDAH10000UF | | 2 | |
| | SDAH12500UF | | 1.9 | |
| | SDAH15000UF | | 1.9 | |
| | SDAH20000UF | | 1.4 | |
| | SDAH25000UF | | 1.1 | |
| Peak Surge Current (8.3 ms Pulse, Half Sine Wave, T _A = 25°C, per leg) | | I _{FSM} | 75 | Amps |
| Operating and Storage Temperature | | T _{OP} & T _{stg} | -55 TO +150 | °C |

NOTE:

^{1/} T_A = 25°C. Derate to 0 @ 150°C

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

DATA SHEET #: RA0003B

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| ELECTRICAL CHARACTERISTIC ^{1/} | SYMBOL | MAXIMUM | UNITS |
|---|---|--|---------|
| Instantaneous Forward Voltage Drop ($I_F = 2A$, 300 - 500 μ sec pulse) | SDAH2500UF SDAH5000UF SDAH7500UF SDAH10000UF SDAH12500UF SDAH15000UF SDAH20000UF SDAH25000UF | 5.5 9.5 15.0 19.0 24.5 28.5 38.0 47.5 | Vdc |
| Reverse Leakage Current (Rated V_R , 300 μ s pulse minimum) | I_{R1} | 3 | μ A |
| Reverse Leakage Current (Rated V_R , $T_A = 100^\circ C$, 300 μ s pulse minimum) | I_{R2} | 0.50 | mA |
| Reverse Recovery Time ($I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$) | t_{RR} | 70 | nsec |

^{1/} $T_A = 25^\circ C$, Unless otherwise specified

| CASE OUTLINE: HV STICK | PART NUMBER | A | B | C |
|------------------------|-------------|------------|------------|------------|
| | | $\pm .030$ | $\pm .020$ | $\pm .010$ |
| | SDAH2500UF | 1.50 | 0.690 | 0.380 |
| | SDAH5000UF | 2.50 | 0.690 | 0.380 |
| | SDAH7500UF | 3.50 | 0.690 | 0.380 |
| | SDAH10000UF | 4.50 | 0.690 | 0.380 |
| | SDAH12500UF | 5.50 | 0.690 | 0.380 |
| | SDAH15000UF | 6.50 | 0.690 | 0.380 |
| | SDAH20000UF | 6.50 | 0.690 | 0.380 |
| | SDAH25000UF | 6.50 | 0.690 | 0.380 |