

**SOLID STATE DEVICES, INC.**

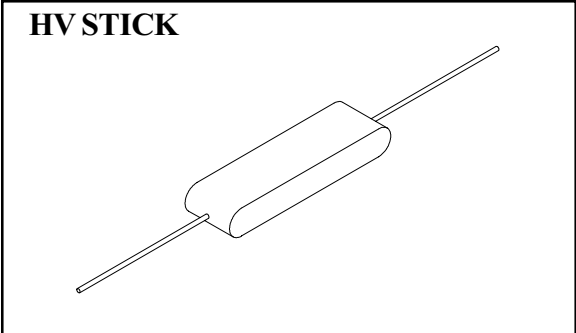
14005 Stage Road \* Santa Fe Springs, Ca 90670  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773

**Designer's Data Sheet**

- FEATURES:**
- Average Output Current 0.5Amps
  - 2500 to 25000 V Blocking Voltage
  - Ultrafast Recovery: 180 nsec Maximum
  - Low Reverse Leakage Current
  - Corona Free Construction
  - Glass Passivated Rectifiers
  - Hermetically Sealed Discretes
  - Superior Thermal Shock Resistance
  - TX and TXV Level Screening Available

**SDA2500F  
 thru  
 SDA25000F**

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



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDA2500F	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	2500	Volts
	SDA5000F		5000	
	SDA7500F		7500	
	SDA10000F		10000	
	SDA12500F		12500	
	SDA15000F		15000	
	SDA20000F SDA25000F		20000 25000	
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, T <sub>A</sub> = 25°C, No Heatsink)		I <sub>o</sub>	0.5	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, T <sub>A</sub> = 25°C, per leg)		I <sub>FSM</sub>	25	Amps
Operating and Storage Temperature		T <sub>OP</sub> & T <sub>stg</sub>	-55 TO +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 # : RA0007A** [DataSheet4U.com](http://DataSheet4U.com)

www.DataSheet4U.com **SDA2500F**  
**thru**  
**SDA25000F**

PRELIMINARY



**SOLID STATE DEVICES, INC.**

14005 Stage Road \* Santa Fe Springs, Ca 90670  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773

ELECTRICAL CHARACTERISTIC <sup>1/</sup>	SYMBOL	MAXIMUM	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 0.5A$ , 300 - 500 $\mu$ sec pulse)	<b>SDA2500F</b> <b>SDA5000F</b> <b>SDA7500F</b> <b>SDA10000F</b> <b>SDA12500F</b> <b>SDA15000F</b> <b>SDA20000F</b> <b>SDA25000F</b>	<b>4.5</b> <b>7.5</b> <b>12.0</b> <b>15.0</b> <b>19.5</b> <b>22.5</b> <b>30.0</b> <b>37.5</b>	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , 300 $\mu$ s pulse minimum)	<b><math>I_{R1}</math></b>	<b>2</b>	<b><math>\mu</math>A</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ C$ , 300 $\mu$ s pulse minimum)	<b><math>I_{R2}</math></b>	<b>0.25</b>	<b>mA</b>
<b>Reverse Recovery Time</b> ( $I_F = 0.5A$ , $I_R = 1.0A$ , $I_{RR} = 0.25A$ )	<b><math>t_{RR}</math></b>	<b>180</b>	<b>nsec</b>

<sup>1/</sup>  $T_A = 25^\circ C$ , Unless otherwise specified

CASE OUTLINE: HV STICK	PART NUMBER	A	B	C
		$\pm .030$	$\pm .020$	$\pm .010$
	SDA2500F	1.125	0.500	0.250
	SDA5000F	1.125	0.500	0.250
	SDA7500F	1.625	0.500	0.250
	SDA10000F	2.000	0.500	0.250
	SDA12500F	2.375	0.500	0.250
	SDA15000F	2.750	0.500	0.250
	SDA20000F	3.500	0.500	0.250
	SDA25000F	4.250	0.500	0.250