



PRELIMINARY

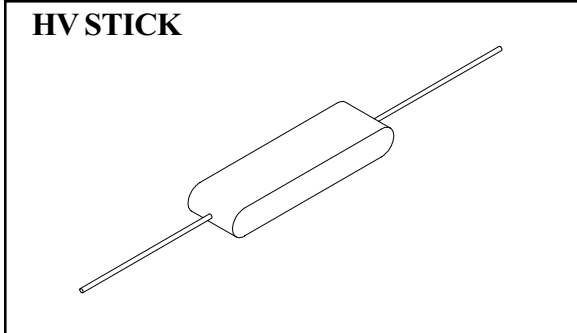
SOLID STATE DEVICES, INC.

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

Designer's Data Sheet

**SDA2500F
thru
SDA25000F**

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



- 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

Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SDA2500F SDA5000F SDA7500F SDA10000F SDA12500F SDA15000F SDA20000F SDA25000F	2500 5000 7500 10000 12500 15000 20000 25000	Volts
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, T _A = 25°C, No Heatsink)	I _o	0.5	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, T _A = 25°C, per leg)	I _{FSM}	25	Amps
Operating and Storage Temperature	T _{OP} & T _{stg}	-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

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

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

CASE OUTLINE: HV STICK	PART NUMBER	A	B	C
		$\pm .030$	$\pm .020$	$\pm .010$
	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