



PRELIMINARY

**SOLID STATE DEVICES, INC.**

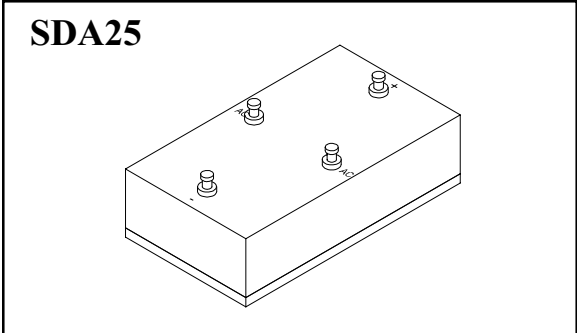
14005 Stage Road \* Santa Fe Springs, Ca 90670  
Phone: (562) 404-4474 \* Fax: (562) 404-1773

**Designer's Data Sheet**

- FEATURES:**
- Ultra Fast Recovery: 70 nsec Maximum
  - 3000 V Blocking Voltage
  - 5000 V Dielectric Voltage
  - Average Output Current 10 Amps
  - Low Reverse Leakage Current
  - Glass Passivated Rectifiers
  - Hermetically Sealed Discretes
  - Aluminum Base for Maximum Thermal Conductivity
  - TX and TXV Level Screening Available

**SDA25-3UF**

**10 AMPS  
70 nsec  
ULTRA FAST RECOVERY  
SINGLE PHASE BRIDGE  
ASSEMBLY**



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	3000	Volts
Average Rectified Forward Current (Resistive load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$ , No Heatsink)	$I_o$	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ , per leg)	$I_{FSM}$	75	Amps
Operating and Storage Temperature	$T_{OP} \ \& \ T_{stg}$	-55 TO +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$\theta_{JC}$	1.5	$^\circ\text{C/W}$

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

**DATA SHEET # : RA0004C**

# SDA25-3UF

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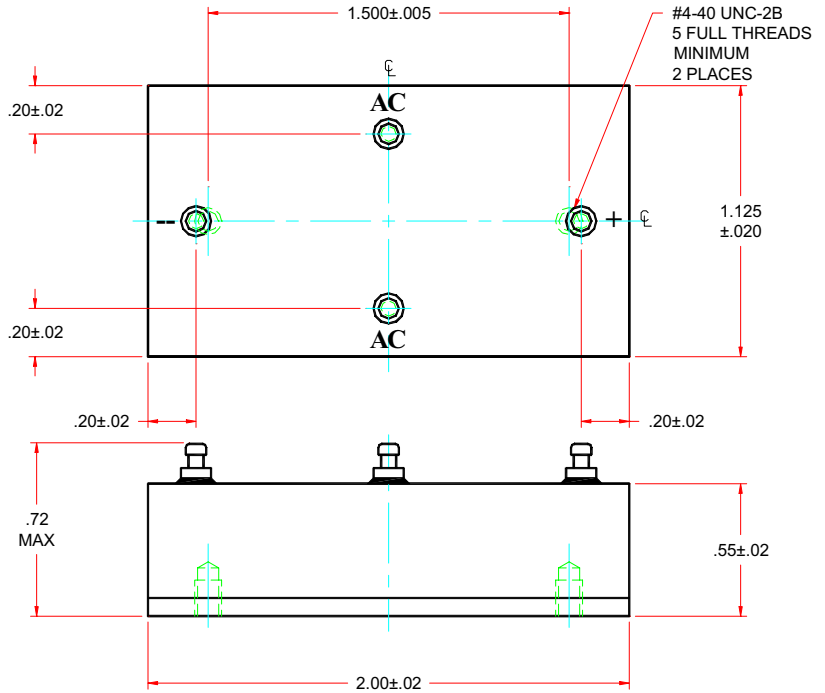
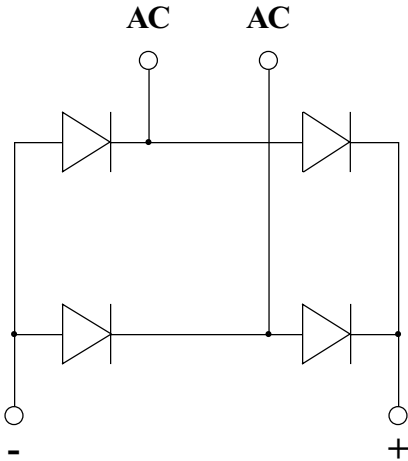
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Electrical Characteristics <sup>1/</sup> (per leg)	SYMBOL	VALUE	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 3A$ , 300 - 500 $\mu$ sec pulse)	$V_{F1}$	6.0	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , 300 $\mu$ s pulse minimum)	$I_{R1}$	5	$\mu$ A
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ C$ , 300 $\mu$ s pulse minimum)	$I_{R2}$	0.5	mA
<b>Reverse Recovery Time</b> ( $I_F = 0.5A$ , $I_R = 1.0A$ , $I_{RR} = 0.25A$ )	$t_{RR}$	70	nsec

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

## CASE OUTLINE: SDA25



## TEMPERATURE DERATING CURVE

