

PRELIMINARY



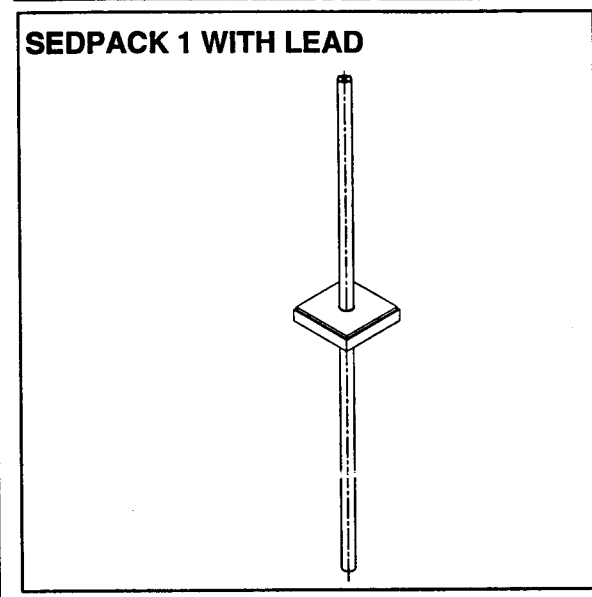
**SSR5825B**

14849 Firestone Boulevard · La Mirada, CA 90638  
 Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**20 AMP  
 45 VOLTS  
 SCHOTTKY  
 RECTIFIER**

**Designer's Data Sheet**

- FEATURES:**
- Extremely Low Forward Voltage Drop  
500mV max at 5 Amps
  - PIV of 45 Volts
  - High Reliability Construction
  - Hermetically Sealed
  - Surge Capability of 300 Amps
  - TJ and Tstg 175°C
  
  - TX, TXV and Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRM(rep) VR	45	Volts
RMS Reverse Voltage	Vr	31	Volts
Half Wave Rectified Forward Current Averaged over Full Cycle (Resistive Load, 60 Hz, Sine Wave, TC=25°C)	Io	20	Amps
Peak Surge Current (TC=55°C, 8.3 ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	300	Amps
Peak Operating Junction Temperature (Forward Current Applied)	TJ(PK)	175	°C
Thermal Resistance, Junction to Case	RθJC	3	°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#: RS0271 B**

**MED**

# SSR5825B

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# SSDI

SOLID STATE DEVICES, INC

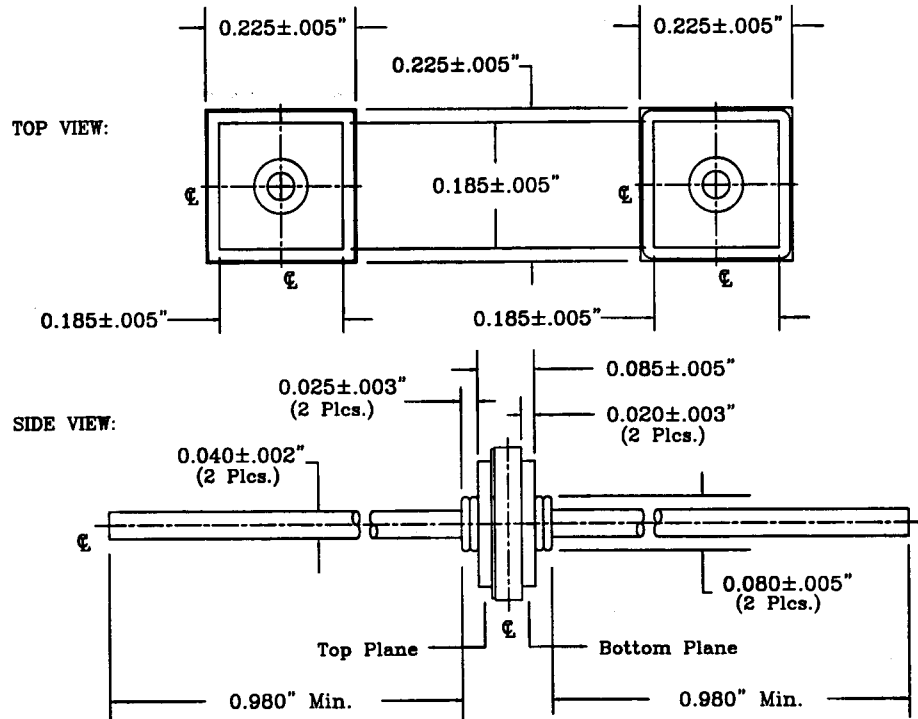
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## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Max. Instantaneous Forward Voltage Drop</b> (TA=25°C, 300µs Pulse)* IF=5A IF=10A IF=20A	<b>VF</b>	0.50 0.55 0.70	Vdc
<b>Max. Instantaneous Forward Voltage Drop</b> (TA= 100°C, 300µs Pulse)* IF=20A	<b>VF</b>	0.59	Vdc
<b>Reverse Leakage Current</b> (VR=45V, TA=100°C)	<b>IR</b>	15	mAdc
<b>Reverse Leakage Current</b> (VR=45 V, TA=25°C)	<b>IR</b>	2	mAdc
<b>Max. Junction Capacitance</b> (VR= 5V, TA=25°C)	<b>CJ</b>	500	pf

\* Pulse Test: Pulse Width = 300µs. Duty Cycle = 2%.

## CASE OUTLINE:



For thermal derating curves and other characteristic curves please contact SSDI Marketing Department.