

PRELIMINARY



14849 Firestone Boulevard · La Mirada, CA 90638
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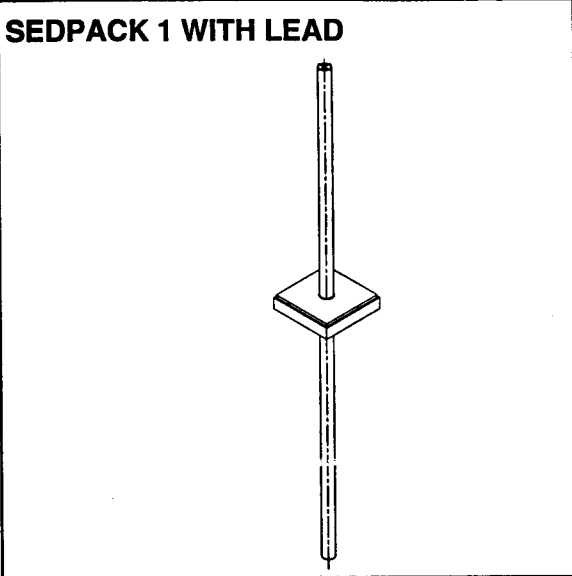
SSR5825B

**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

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SSDI

SOLID STATE DEVICES, INC

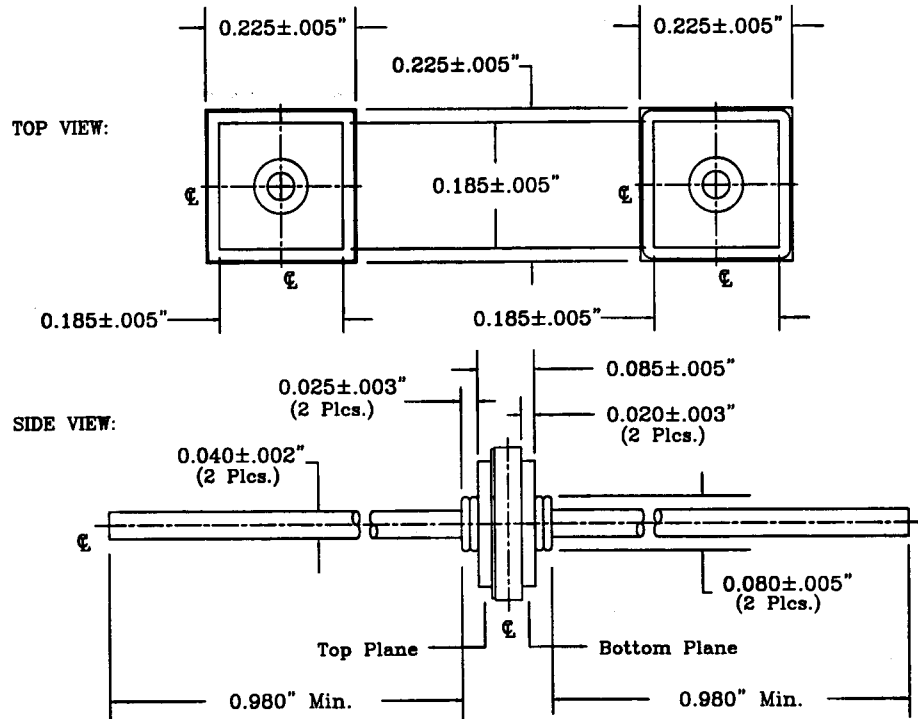
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Max. Instantaneous Forward Voltage Drop ($T_A=25^\circ\text{C}$, 300 μs Pulse)* $I_F=5\text{A}$ $I_F=10\text{A}$ $I_F=20\text{A}$	V_F	0.50 0.55 0.70	Vdc
Max. Instantaneous Forward Voltage Drop ($T_A=100^\circ\text{C}$, 300 μs Pulse)* $I_F=20\text{A}$	V_F	0.59	Vdc
Reverse Leakage Current ($V_R=45\text{V}$, $T_A=100^\circ\text{C}$)	I_R	15	mAdc
Reverse Leakage Current ($V_R=45\text{V}$, $T_A=25^\circ\text{C}$)	I_R	2	mAdc
Max. Junction Capacitance ($V_R=5\text{V}$, $T_A=25^\circ\text{C}$)	C_J	500	pf

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

CASE OUTLINE:



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