



PRELIMINARY

**SOLID STATE DEVICES, INC.**

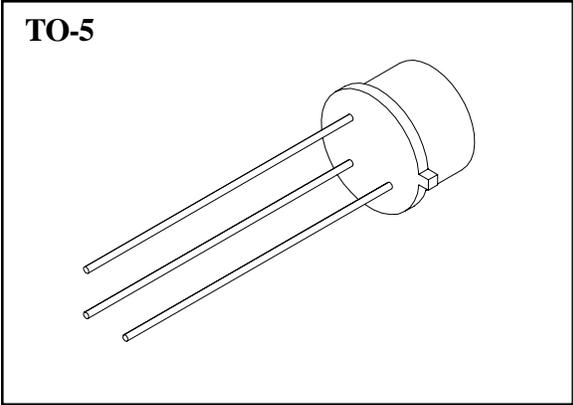
14830 Valley View Ave. \* La Mirada, Ca 90638  
Phone: (562) 404-7855 \* Fax: (562) 404-1773

**Designer's Data Sheet**

**SSR0845CA/5**

**8 AMP <sup>1/</sup>  
45 VOLTS  
COMMON ANODE  
SCHOTTKY RECTIFIER**

- FEATURES:**
- Extremely Low Forward Voltage Drop
  - Hermetically Sealed
  - Guard Ring for Overvoltage Protection
  - Eutectic Die Attach
  - 150°C Operating Junction Temperature
  - TX, TXV and Space Level Screening Available



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	45	Volts
Average Total Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_C = 25^\circ C$ )	$I_o$	8 <sup>1/</sup>	Amps
Peak Surge Current <sup>2/</sup> (8.3 ms Pulse, Half Sine Wave Superimposed on $I_o$ , allow junction to reach equilibrium between pulses, $T_C = 25^\circ C$ )	$I_{FSM}$	80	Amps
Operating and Storage Temperature	$T_{OP}$ $T_{STG}$	-65 TO +165 -65 TO +200	°C
Maximum Thermal Resistance <sup>3/</sup> Junction to Case	$R_{\theta JC}$	7.0	°C/W

**Notes:**

- <sup>1/</sup> 4 Amps per leg; 8 Amps total output.
- <sup>2/</sup> Per leg. Each leg surged independantly from the other leg.
- <sup>3/</sup> Both legs tied together.

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

**DATA SHEET #: SH0023A**

# SSR0845CA/5

PRELIMINARY



**SOLID STATE DEVICES, INC.**

14830 Valley View Ave. \* La Mirada, Ca 90638  
 Phone: (562) 404-7855 \* Fax: (562) 404-1773

Electrical Characteristics (per leg)		SYMBOL	MAXIMUM	UNITS
<b>Instantaneous Forward Voltage Drop</b> <sup>1/</sup> (T <sub>A</sub> = 25°C, 300 - 500µs Pulse)	I <sub>F</sub> = 1 A <sub>DC</sub>	V <sub>F1</sub>	0.48	V <sub>DC</sub>
	I <sub>F</sub> = 2 A <sub>DC</sub>	V <sub>F2</sub>	0.56	
	I <sub>F</sub> = 4 A <sub>DC</sub>	V <sub>F3</sub>	0.68	
<b>Instantaneous Forward Voltage Drop</b> (I <sub>F</sub> = 2 A <sub>DC</sub> , T <sub>A</sub> = -55°C, 300 - 500µs Pulse)		V <sub>F4</sub>	0.63	V <sub>DC</sub>
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 25°C, 300 µs min Pulse)		I <sub>R1</sub>	100	µA
<b>Reverse Leakage Current</b> (Rated V <sub>R</sub> , T <sub>A</sub> = 100°C, 300 µs min Pulse)		I <sub>R2</sub>	5	1mA
<b>Junction Capacitance</b> (V <sub>R</sub> = 10 V <sub>DC</sub> , T <sub>A</sub> = 25°C, f = 1 MHz)		C <sub>J</sub>	350	pF

**CASE OUTLINE: JEDEC TO-5**

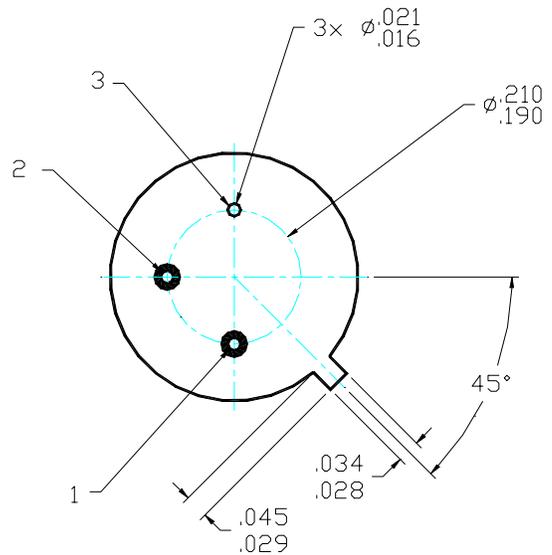
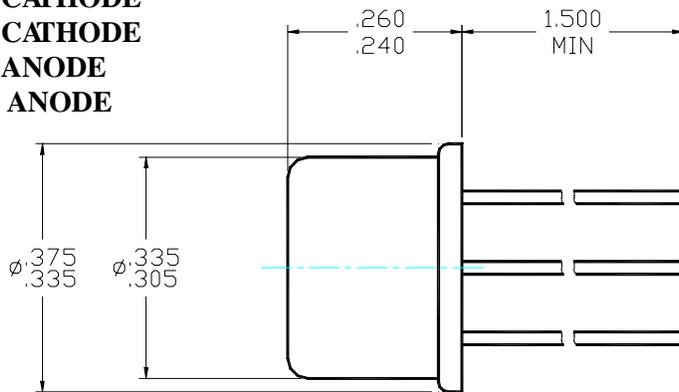
**PIN OUT:**

**PIN 1: CATHODE**

**PIN 2: CATHODE**

**PIN 3: ANODE**

**CASE: ANODE**



**APPLICATION NOTES:**

<sup>1/</sup> V<sub>F</sub> as measured between Pins 1 and 2 within .100" from the case, and Pin 3 directly at the case.