

# SOLID STATE DEVICES, INC.

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

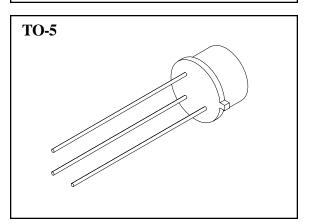
# **Designer's Data Sheet**

### **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

# SSR0845CA/5

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



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

### **Notes:**

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

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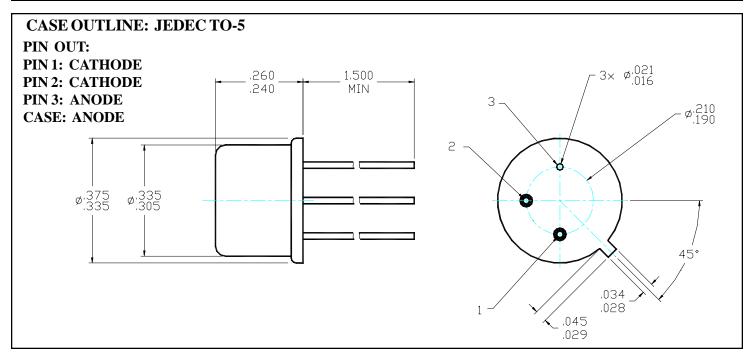
### **PRELIMINARY**



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Electrical Characteristics (per leg)		SYMBOL	MAXIMUM	UNITS
Instantaneous Forward Voltage Drop <sup>1/</sup> (T <sub>A</sub> = 25°C, 300 - 500µs Pulse)	$I_F = 1 A_{DC}$ $I_F = 2 A_{DC}$ $I_F = 4 A_{DC}$	$\begin{array}{c} V_{F1} \\ V_{F2} \\ V_{F3} \end{array}$	0.48 0.56 0.68	V <sub>DC</sub>
Instantaneous Forward Voltage Drop (I <sub>F</sub> = 2 A <sub>DC</sub> , T <sub>A</sub> = -55°C, 300 - 500µs Pulse)		$ m V_{F4}$	0.63	V <sub>DC</sub>
Reverse Leakage Current (Rated V <sub>R</sub> , T <sub>A</sub> = 25°C, 300 µs min Pulse)		$I_{R1}$	100	μΑ
Reverse Leakage Current (Rated $V_R$ , $T_A$ = 100°C, 300 $\mu$ s min Pulse)		$I_{R2}$	5	1mA
<b>Junction Capacitance</b> (V <sub>R</sub> = 10 V <sub>DC</sub> , T <sub>A</sub> = 25°C, f = 1 MHz)		CJ	350	pF



### **APPLICATION NOTES:**

 $\underline{1}/VF$  as measured between Pins 1 and 2 within .100" from the case, and Pin 3 directly at the case.