

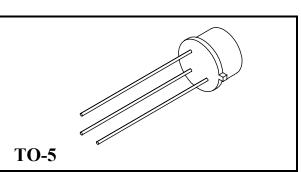
## SSR1008/5 SSR1009/5 SSR1010/5

#### **Designer's Data Sheet**

#### **FEATURES:**

- Extremely Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Package
- Guard Ring for Overvoltage Protection
- Eutectic Die Attach
- 175°C Operating Junction Temperature
- TX, TXV, or Space Level Screening Available

### 10 AMP 80 – 100 VOLTS SCHOTTKY RECTIFIER



## MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage SSR1008/5	V <sub>RRM</sub>	80	
SSR1009/5 SSR1010/5	V <sub>RWM</sub>	90 100	Volts
	V <sub>R</sub>		
Average Rectified Output Current <sup>1/</sup>			
(Resistive Load, 60Hz, Sine Wave, TA=25°C)	Io	10	Amps
Peak Surge Current <sup>1/</sup>			
(8.3 ms Pulse, Half Sine Wave, superimposed on $I_0$ , allow junction to reach equilibrium between pulses, TA=25°C)	I <sub>FSM</sub>	150	Amps
Operating and Storage Temperature	T <sub>OP</sub> & T <sub>STG</sub>	-65 to +175	°C
Maximum Thermal Resistance <sup>1/</sup>			
Junction to Case	$\mathbf{R}_{\mathbf{ hetaJC}}$	7.0	°C/W

Notes: 1/ For optimal performance, connect leads 1 & 2 together (Anode).

<b>NOTE:</b> All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	DATA SHEET #: SH0022C	DOC
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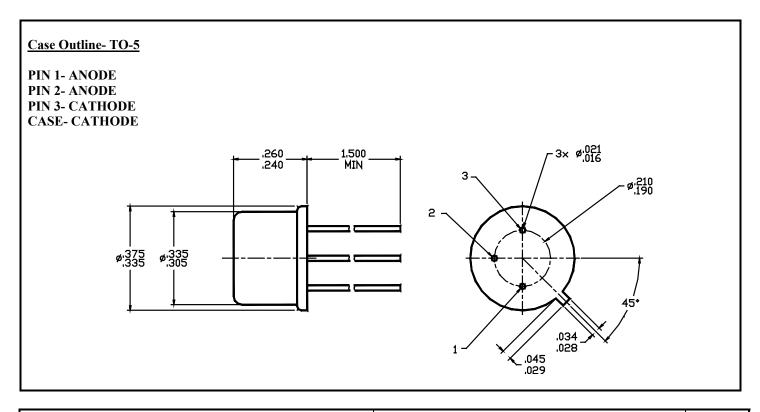


# SSR1008/5 SSR1009/5 SSR1010/5

ELECTRICAL CHARACTERISTICS			
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop <sup>2/</sup> (I <sub>F</sub> = 1 Adc, T <sub>A</sub> = 25°C, 300 - 500 $\mu$ s Pulse) (I <sub>F</sub> = 5 Adc, T <sub>A</sub> = 25°C, 300 - 500 $\mu$ s Pulse) (I <sub>F</sub> = 10 Adc, T <sub>A</sub> = 25°C, 300 - 500 $\mu$ s Pulse)	$V_{F1}$ $V_{F2}$ $V_{F3}$	0.56 0.73 0.85	Vdc
Instantaneous Forward Voltage Drop ( $I_F = 5 \text{ Adc}, T_A = -55^{\circ}\text{C}, 300 - 500 \mu\text{s}$ Pulse)	$V_{F4}$	0.82	Vdc
Reverse Leakage Current (Rated $V_R$ , $T_A = 25$ °C, 300 $\mu$ s Pulse Minimum)	I <sub>R1</sub>	100	μΑ
Reverse Leakage Current (Rated $V_R$ , $T_A = 100^{\circ}$ C, 300µs Pulse Minimum)	I <sub>R2</sub>	5	mA
<b>Junction Capacitance</b> ( $V_R = 10 \text{ Vdc}, T_A = 25^{\circ}\text{C}, f = 1 \text{ MHz}$ )	CJ	400	pF

NOTES:

 $\underline{2}$ / V<sub>F</sub> as measured between pins 1 and 2 in common, within .100" from the case, and pin 3 directly at the case.



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