



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, Ca 90638  
 Phone: (562) 404-4474 \* Fax: (562) 404-1773  
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**SSR0508-28  
 SSR0509-28  
 SSR0510-28**

**Designer's Data Sheet**

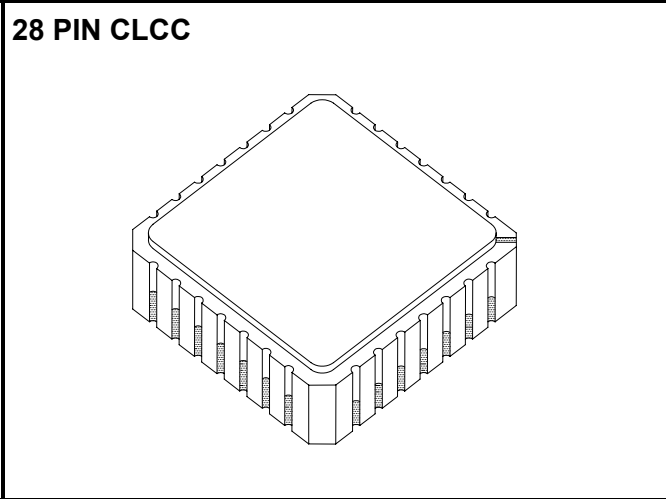
**FEATURES:**

- Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Surface Mount Package
- Guard Ring for Overvoltage Protection
- Ceramic Seals for Improved Hermeticity
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Junction Temperature

Also Available in the following configurations:

- Common Cathode Centertap: SSR1010-28CT
- Common Anode Centertap: SSR1010-28CA
- Doubler: SSR0510-28D
- TX, TXV, and Space Level Screening Available

**5 AMPS  
 80-100 VOLTS  
 SCHOTTKY  
 RECTIFIER**



<b>MAXIMUM RATINGS</b>		<b>Symbol</b>	<b>Value</b>	<b>Units</b>
<b>Peak Repetitive Reverse Voltage and DC Blocking Voltage</b>	<b>SSR0508-28</b>	$V_{RRM}$	80	<b>Volts</b>
	<b>SSR0509-28</b>	$V_{RWM}$	90	
	<b>SSR0510-28</b>	$V_R$	100	
<b>Average Rectified Forward Current</b> (Resistive Load, 60 Hz, Sine Wave, $T_A=25^\circ\text{C}$ )		$I_O$	5	<b>Amps</b>
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave Superimposed on $I_O$ , allow junction to reach equilibrium between pulses, $T_A=25^\circ\text{C}$ )		$I_{FSM}$	200	<b>Amps</b>
<b>Operating and Storage Temperature</b>		$T_{OP} \ \& \ T_{stg}$	-65 to +175	<b>°C</b>
<b>Maximum Thermal Resistance</b> Junction to Case		$R_{\theta JC}$	6.0	<b>°C/W</b>

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

**DATA SHEET #: RS0183E**

**DOC**



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<b>ELECTRICAL CHARACTERISTICS (Per Leg)</b>		<b>Symbol</b>	<b>Max</b>	<b>Unit</b>
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = 25^\circ\text{C}$ , Pulse)	$I_F = 1$ Amps	$V_{F1}$	0.56	<b>Volts</b>
	$I_F = 5$ Amps	$V_{F2}$	0.72	
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5$ Amps, $T_A = -55^\circ\text{C}$ , Pulse)		$V_{F3}$	0.87	<b>Volts</b>
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , Pulse)		$I_{R1}$	100	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , Pulse)		$I_{R2}$	5	<b>mA</b>
<b>Junction Capacitance</b> ( $V_R = 10$ V <sub>DC</sub> , $T_A = 25^\circ\text{C}$ , $f = 1$ MHz)		$C_J$	400	<b>pF</b>

**CASE OUTLINE: 28 PIN CLCC**

**PIN OUT:**

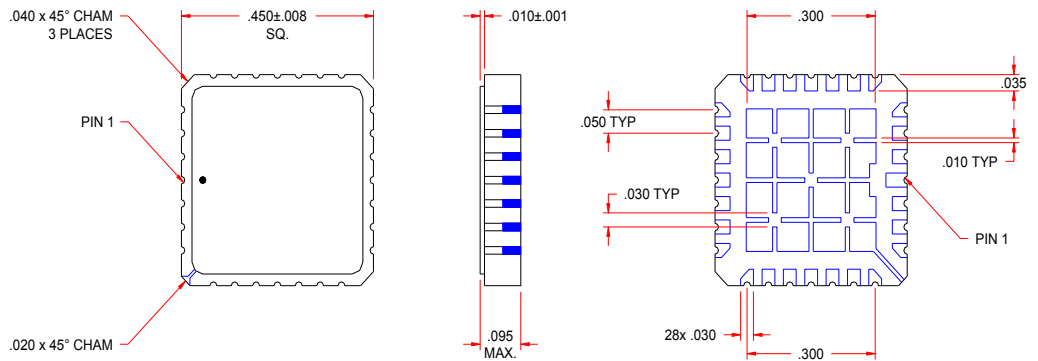
**PIN 5-11: CATHODE**

**PIN 1, 15-28: ANODE**

**PIN 2, 3, 13, 14: N/C**

Note:

For optimal performance,  
 connect Anode pins 1 & 15-28  
 together and connect  
 Cathode pins 5-11 together.



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