



**Solid State Devices, Inc.**

14701 Firestone Blvd \* La Mirada, Ca 90638  
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## Designer's Data Sheet

### FEATURES:

- Extremely 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

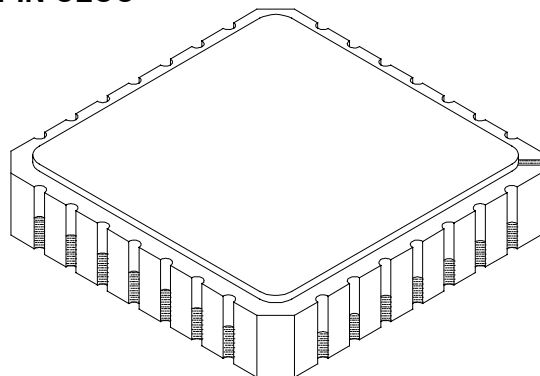
Also Available in the following configurations:

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

**SSR1008-28**  
**SSR1009-28**  
**SSR1010-28**

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

**28 PIN CLCC**



MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR1008-28	$V_{RRM}$	80	Volts
	SSR1009-28	$V_{RWM}$	90	
	SSR1010-28	$V_R$	100	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A=25^\circ\text{C}$ )		$I_O$	10	Amps
Peak Surge Current (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	Amps
Operating and Storage Temperature		$T_{OP}$ & $T_{stg}$	-65 to +175	°C
Maximum Thermal Resistance Junction to Case		$R_{\theta JC}$	6.0	°C/W

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

**DATA SHEET #: RS0195B**

**DOC**



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**SSR1008-28**  
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**SSR1010-28**

ELECTRICAL CHARACTERISTICS	Symbol	Max	Unit
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = 25^\circ\text{C}$ , Pulse)	$I_F = 1\text{ Amps}$ $I_F = 5\text{ Amps}$ $I_F = 10\text{ Amps}$	$V_{F1}$ $V_{F2}$ $V_{F3}$	0.56 0.72 0.82
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 10\text{ Amps}$ , $T_A = -55^\circ\text{C}$ , Pulse)		$V_{F4}$	0.87
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , Pulse)		$I_{R1}$	100
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , Pulse)		$I_{R2}$	5
<b>Junction Capacitance</b> ( $V_R = 10\text{ V}_{DC}$ , $T_A = 25^\circ\text{C}$ , $f = 1\text{ MHz}$ )		$C_J$	400

**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.

The drawings show a square package with a side height of .095 MAX. The top view is a square with a side length of .450 ± .008. It features chamfers of .040 x 45° at three corners and .020 x 45° at the other three. The bottom view shows a 28-pin configuration with a .300 inch width and .030 inch spacing between pins. Pin 1 is located at the top right. Other dimensions include .050 TYP for the top lead height, .030 TYP for the bottom lead height, .010 TYP for the lead thickness, and .035 for the lead width.