

**SOLID STATE DEVICES, INC.**

14830 Valley View Blvd \* La Mirada, Ca 90638  
 Phone: (562) 404-7855 \* Fax: (562) 404-1773  
 ssdi@ssdi-power.com \* www.ssdi-power.com

**Designer's Data Sheet**

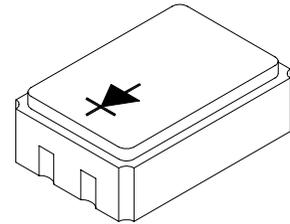
**FEATURES:**

- **Low Forward Voltage Drop: 0.48V**
- **Hermetically Sealed Surface Mount Package**
- **Guard Ring for Overvoltage Protection**
- **Eutectic Die Attach**
- **TX, TXV and Space Level Screening Available**
- **3 Amp Replacement for 1N5817, 1N5818, and 1N5819**
- **Higher Voltages Available; Contact Factory**

**SSR0340-4**

**3 AMP  
 40 VOLTS  
 SCHOTTKY  
 SMD RECTIFIER**

LCC4



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	40	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, $T_A = 100^\circ\text{C}$ )	$I_o$	3	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on $I_o$ , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$ )	$I_{FSM}$	60	Amps
Operating and Storage Temperature	Top & Tstg	-55 TO +150	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	15	$^\circ\text{C/W}$

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

**DATA SHEET #:** SH0027A [www.Sheet4U.com](http://www.Sheet4U.com)

# SSR0340-4



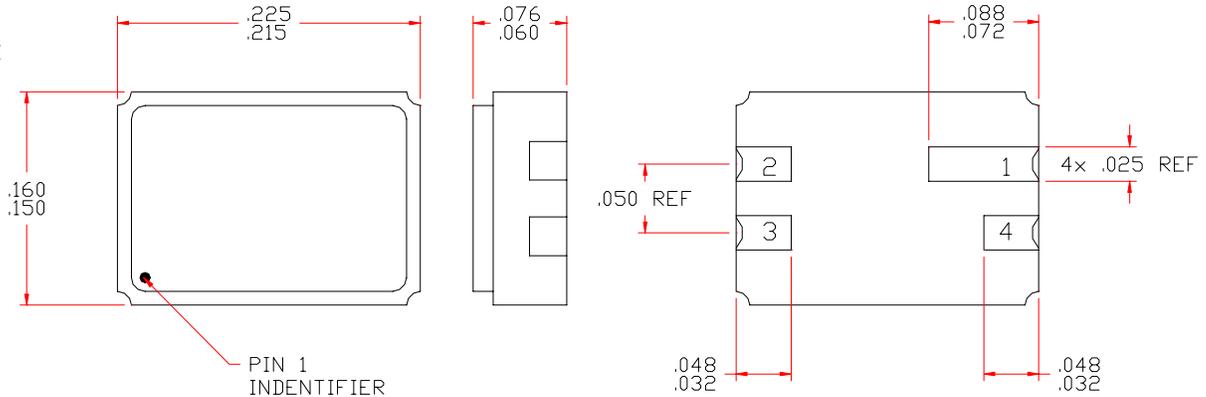
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Electrical Characteristics		SYMBOL	MAXIMUM	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = 25^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$I_F = 1A_{DC}$	$V_{F1}$	<b>0.48</b>	<b>V<sub>DC</sub></b>
	$I_F = 2A_{DC}$	$V_{F2}$	<b>0.58</b>	
	$I_F = 3A_{DC}$	$V_{F3}$	<b>0.71</b>	
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = -55^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$I_F = 1A_{DC}$	$V_{F4}$	<b>0.56</b>	<b>V<sub>DC</sub></b>
	$I_F = 2A_{DC}$	$V_{F5}$	<b>0.64</b>	
	$I_F = 3A_{DC}$	$V_{F6}$	<b>0.74</b>	
<b>Instantaneous Forward Voltage Drop</b> ( $T_A = +100^\circ\text{C}$ , 300 $\mu\text{s}$ Pulse)	$I_F = 1A_{DC}$	$V_{F7}$	<b>0.40</b>	<b>V<sub>DC</sub></b>
	$I_F = 2A_{DC}$	$V_{F8}$	<b>0.53</b>	
	$I_F = 3A_{DC}$	$V_{F9}$	<b>0.66</b>	
<b>Reverse Leakage Current</b> (Rated $V_R$ , 300 $\mu\text{sec}$ pulse minimum)	$T_A = 25^\circ\text{C}$	$I_{R1}$	<b>0.1</b>	<b>mA</b>
	$T_A = +100^\circ\text{C}$	$I_{R2}$	<b>10</b>	
<b>Junction Capacitance</b> ( $V_R = 5V_{DC}$ , $T_A = 25^\circ\text{C}$ , $f = 1\text{MHz}$ )		$C_J$	<b>300</b>	<b>pF</b>

### CASE OUTLINE: LCC4

- PIN 1: Cathode**
- PIN 2: Anode**
- PIN 3: Anode**
- PIN 4: Cathode**



### TYPICAL OPERATING CURVES

( $T_A = 25^\circ\text{C}$  unless otherwise specified)

