



PRELIMINARY

# SOLID STATE DEVICES, INC.

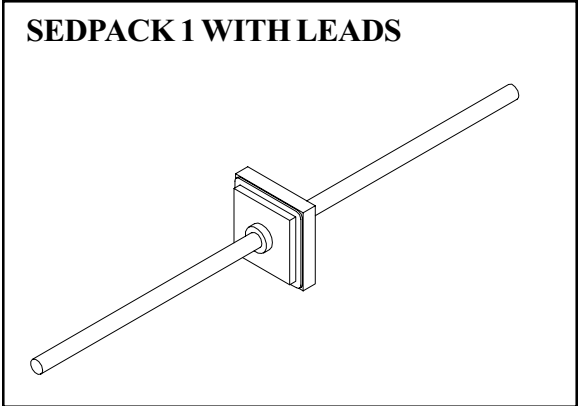
14005 Stage Road \* Santa Fe Springs, Ca 90670  
Phone: (562) 404-4474 \* Fax: (562) 404-1773

## Designer's Data Sheet

- FEATURES:**
- **Extremely Low Forward Voltage Drop**  
450mV max at 5 Amps
  - **PIV of 40 Volts**
  - **High Reliability Construction**
  - **Hermetically Sealed**
  - **Surge Capability of 300 Amps**
  - **T<sub>J</sub> and T<sub>stg</sub> 175°C**
  - **TX, TXV and Space Level Screening Available**

# SSR1640A

## 15 AMP 40 VOLTS SCHOTTKY RECTIFIER



Maximum Ratings	SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	$V_{RM(rep)}$ $V_R$	40	Volts
RMS Reverse Voltage	$V_r$	28	Volts
Half Wave Rectified Forward Current Averaged over Full Cycle (Resistive Load, 60Hz, Sine Wave, T <sub>C</sub> = 25 °C)	$I_o$	15	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I <sub>o</sub> , allow junction to reach equilibrium between pulses, T <sub>C</sub> = 55°C)	$I_{FSM(surge)}$	300	Amps
Operating Junction Temperature	T <sub>J</sub> (PK)	-55 TO +175	°C
Maximum Thermal Resistance Junction to Case	R <sub>θJC</sub>	3.0	°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 #: SH0020A**

# SSR1640A

PRELIMINARY



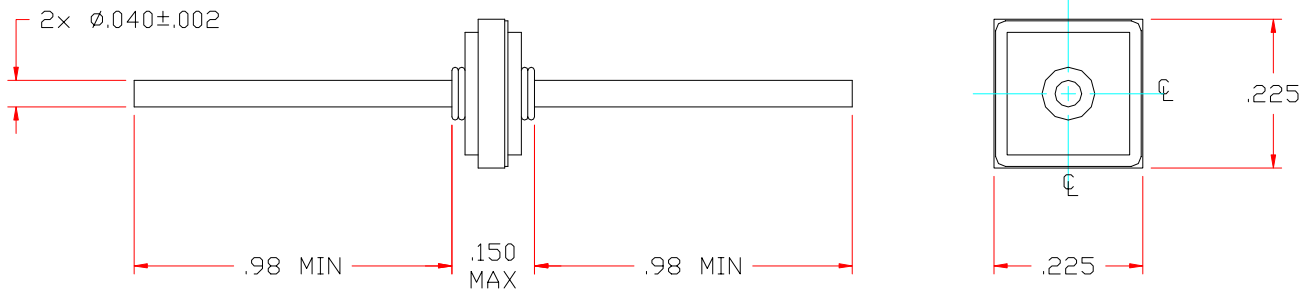
**SOLID STATE DEVICES, INC.**

14005 Stage Road \* Santa Fe Springs, Ca 90670

Phone: (562) 404-4474 \* Fax: (562) 404-1773

Electrical Characteristics	SYMBOL	VALUE	UNITS
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5A_{DC}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse) ( $I_F = 10A_{DC}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse) ( $I_F = 15A_{DC}$ , $T_A = 25^\circ C$ , 300 $\mu s$ Pulse)	$V_{F1}$ $V_{F2}$ $V_{F3}$	<b>0.45</b> <b>0.55</b> <b>0.62</b>	$V_{DC}$
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 15A_{DC}$ , $T_A = -55^\circ C$ , 300 $\mu s$ Pulse)	$V_{F4}$	<b>0.64</b>	$V_{DC}$
<b>Reverse Leakage Current</b> Rated $V_R$ , $T_A = 25^\circ C$	$I_{R1}$	<b>5</b>	<b>mA</b>
<b>Reverse Leakage Current</b> Rated $V_R$ , $T_A = 100^\circ C$	$I_{R2}$	<b>200</b>	<b>mA</b>
<b>Junction Capacitance</b> ( $V_R = 5V_{DC}$ , $T_A = 25^\circ C$ , $f = 1MHz$ )	$C_J$	<b>800</b>	<b>pF</b>

## CASE OUTLINE:



Tolerances (Unless otherwise specified)

XX:  $\pm .01$ "

XXX:  $\pm .005$ "

For Thermal derating and other characteristic curves please contact SSDI Marketing Department.