



PRELIMINARY

SOLID STATE DEVICES, INC.

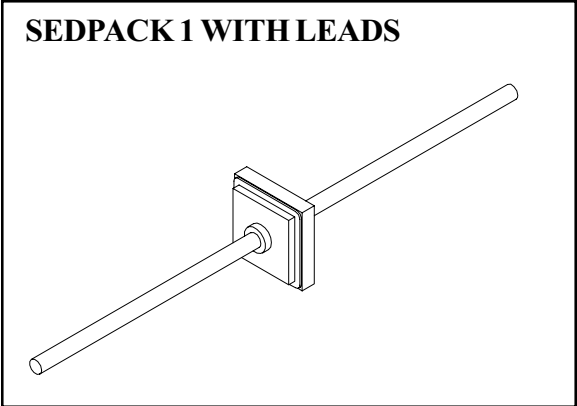
14005 Stage Road * Santa Fe Springs, Ca 90670
Phone: (562) 404-4474 * Fax: (562) 404-1773

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_J and T_{stg} 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 _C = 25 °C)	I_o	15	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I _o , allow junction to reach equilibrium between pulses, T _C = 55°C)	$I_{FSM(surge)}$	300	Amps
Operating Junction Temperature	T _{J(PK)}	-55 TO +175	°C
Maximum Thermal Resistance Junction to Case	R _{θJC}	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



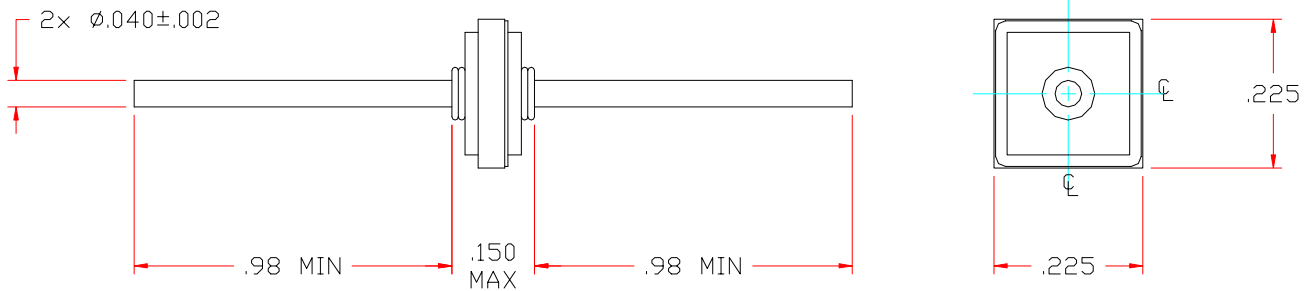
SOLID STATE DEVICES, INC.

14005 Stage Road * Santa Fe Springs, Ca 90670

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

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

CASE OUTLINE:



Tolerances (Unless otherwise specified)

XX: $\pm .01$ "

XXX: $\pm .005$ "

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