



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, CA 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SDR950S1 THRU SDR952S1

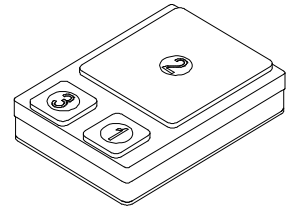
**60 AMP
100-200 Volts
35nsec
Hyper Fast
Rectifier**

DESIGNER'S DATA SHEET

Features:

- Hyper Fast Recovery: 35nsec typical
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Surface Mount Power Package
- Gold Eutectic Die Attach Available
- Ultrasonic Aluminum Wire Bonds
- TX, TXV, and Space Level Screening Available.

SMD1



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage ^{1/}	SDR950S1	V_{RRM}	100	Volts
	SDR951S1	V_{RWM}	150	
	SDR952S1	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	60	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$) ^{1/}		I_{FSM}	600	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +200	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case,		R_{qJL}	0.8	$^\circ\text{C/W}$

^{1/} Connect pins 2&3 together

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

DATA SHEET #: RH0037C

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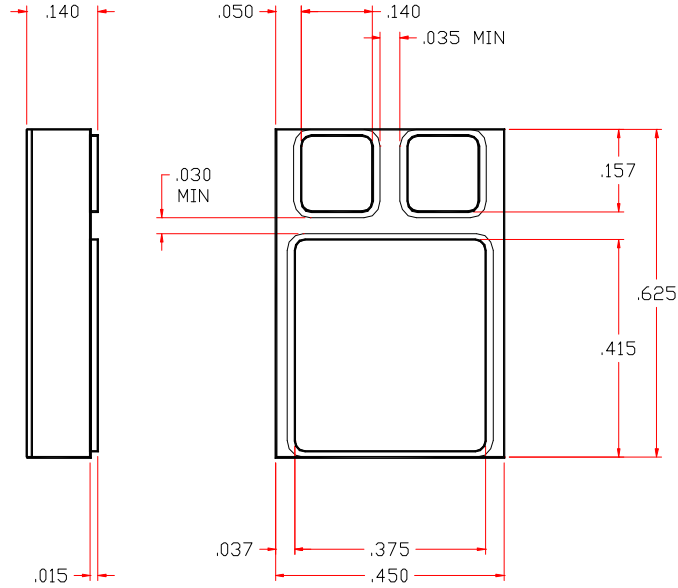
Electrical Characteristics	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (IF=25Adc, TA = 25°C, 300 μsec pulse) (IF=50Adc, TA = 25°C, 300 μsec pulse)	V_{F1}	—	0.95 1.05	Volts
Instantaneous Forward Voltage Drop (IF= 50Adc, TA = 100°C, 300 μsec pulse) (IF= 50Adc, TA = -55°C, 300 μsec pulse)	V_{F2}	—	0.95 1.20	Volts
Reverse Leakage Current (Rated V _R , TA = 25°C, 300 μsec pulse minimum)	I_{R1}	—	10	mA
Reverse Leakage Current (Rated V _R , TA = 100°C, 300 μsec pulse minimum)	I_{R2}	—	1	mA
Junction Capacitance (V _R = 10 Vdc, TA = 25°C, f = 1MHz)	C_J	—	950	pF
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, TA = 25°C)	t_{rr}	—	45	nsec

CASE OUTLINE: SMD1

Pin 1: CATHODE

Pin 2: ANODE

Pin 3: ANODE



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