



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

**SDR620G
THRU
SDR622G**

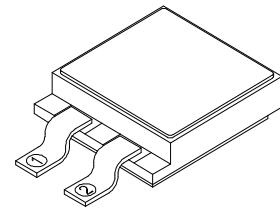
DESIGNER'S DATA SHEET

Features:

- Replaces 1N5816 Devices
- Hyper Fast Recovery: 35nsec Maximum
- 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
- Low Inductance Flat Leads
- TX, TXV, and Space Level Screening Available.

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

Cerpack



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage ^{1/}	SDR620G	V_{RRM}	100	Volts
	SDR621G	V_{RWM}	150	
	SDR622G	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$) ^{2/}		I_o	20	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$) ^{2/}		I_{FSM}	300	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +200	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case, ^{2/}		$R_{\theta JL}$	1.1	$^\circ\text{C/W}$

^{1/} Higher Voltage class available

^{2/} Both Anode leads tied 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 #: RH0067B

DOC



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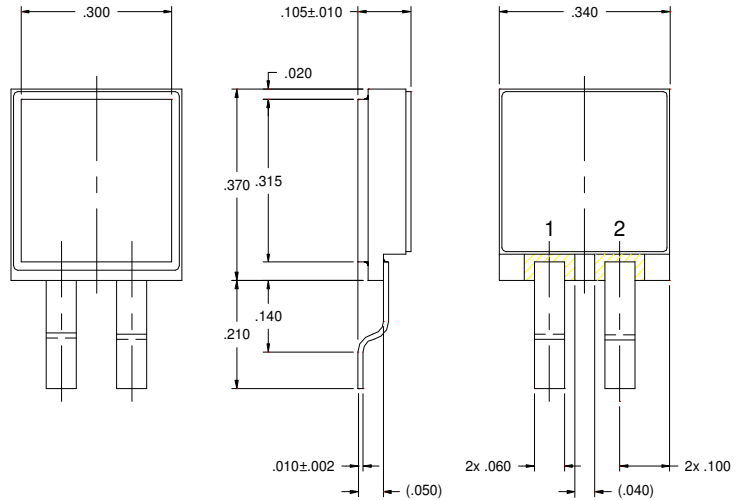
Electrical Characteristics	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (IF=10Adc, T _A = 25°C, 300 μsec pulse) ^{1/} (IF=20Adc, T _A = 25°C, 300 μsec pulse) ^{1/}	V_{F1}	—	1.0 1.2	Volts
Instantaneous Forward Voltage Drop (IF= 10Adc, T _A = 100°C, 300 μsec pulse) ^{1/} (IF= 10Adc, T _A = -55°C, 300 μsec pulse) ^{1/}	V_{F2}	—	0.9 1.15	Volts
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 μsec pulse minimum)	I_{R1}	—	10	μA
Reverse Leakage Current (Rated V _R , T _A = 100°C, 300 μsec pulse minimum)	I_{R2}	—	1	mA
Junction Capacitance (V _R = 10 Vdc, T _A = 25°C, f = 1MHz)	C_J	—	225	pF
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, T _A = 25°C)	t_{rr}	—	35	nsec

Case Outline: Cerpack

Pin 1: Anode

Pin 2: Anode

Case: Cathode



^{1/} For best results connect pin 1&2 together in operation

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