

**Solid State Devices, Inc.**

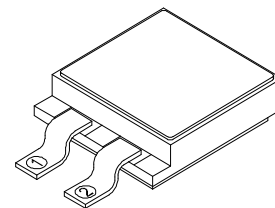
14701 Firestone Blvd * La Mirada, CA 90638
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**SDR620G
THRU
SDR622G****DESIGNER'S DATA SHEET****Features:**

- 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/}		Io	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	°C
Maximum Thermal Resistance Junction to Case, ^{2/}		R_{qJL}	1.1	°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

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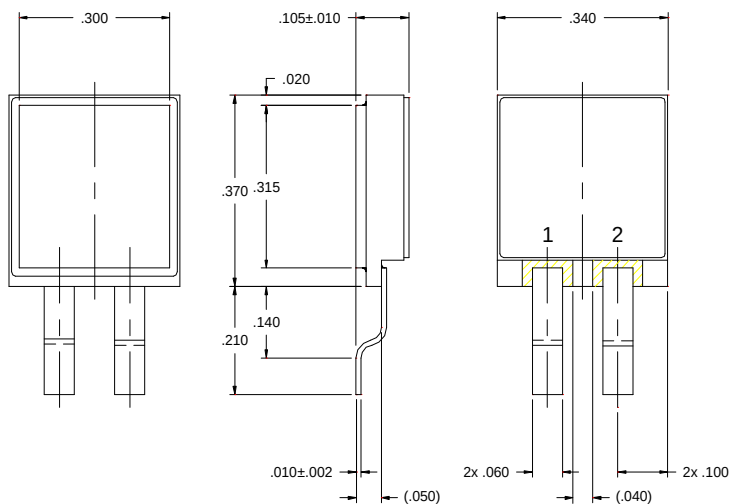
Electrical Characteristics	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (IF=10Adc, T _A = 25°C, 300 μsec pulse) ^{1/} (IF=20Adc, T _A = 25°C, 300 μsec pulse) ^{1/}	V _{F1}	—	1.0 1.2	Volts
Instantaneous Forward Voltage Drop (IF= 10Adc, T _A = 100°C, 300 μsec pulse) ^{1/} (IF= 10Adc, T _A = -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	mA
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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