



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

**SDR623G
Thru
SDR626G**

**20A 35nsec 300-600 V
Hyper Fast Rectifier**

DESIGNER'S DATA SHEET ^{1/}

Part Number/Ordering Information ^{1/}
SDR62 **G** **—** **—** **—**

└─ Screening ^{2/}
 — = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

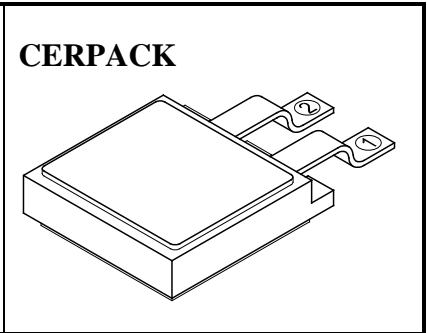
└─ Package G = Cerpack

└─ Voltage 3 = 300V, 4 = 400V, 5 = 500V, 6 = 600V

- Features:**
- Hyper Fast Recovery: 35nsec Maximum ^{3/}
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Package
 - Gold Eutectic Die Attach
 - Ultrasonic Aluminum Wire Bonds
 - TX, TXV, and S-Level Screening Available ^{2/}

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse Voltage	SDR623G SDR624G SDR625G SDR626G	V_{RRM} V_{RWM} V_R	300 400 500 600 Volts
Average Rectified Forward Current ^{4/} (Resistive Load, 60 Hz Sine Wave, $T_A = 25\text{ }^\circ\text{C}$)	I_o	20	Amps
Peak Surge Current ^{4/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25\text{ }^\circ\text{C}$)	I_{FSM}	200	Amps
Operating & Storage Temperature	T_{OP} & T_{STG}	-65 to +200	°C
Maximum Total Thermal Resistance Junction to Case ^{4/}	$R_{\theta JC}$	1.5 ^{5/}	°C/W

Notes:
 1/ For ordering information, Price, Operating Curves, and Availability- Contact Factory.
 2/ Screened to MIL-PRF-19500.
 3/ Recovery Conditions: $I_F = 0.5$ Amp, $I_R = 1.0$ Amp, rec. to .25 Amp.
 4/ Both Legs Tied Together.
 5/ 1.2°C/W typ.



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

DATA SHEET #: RH0053H

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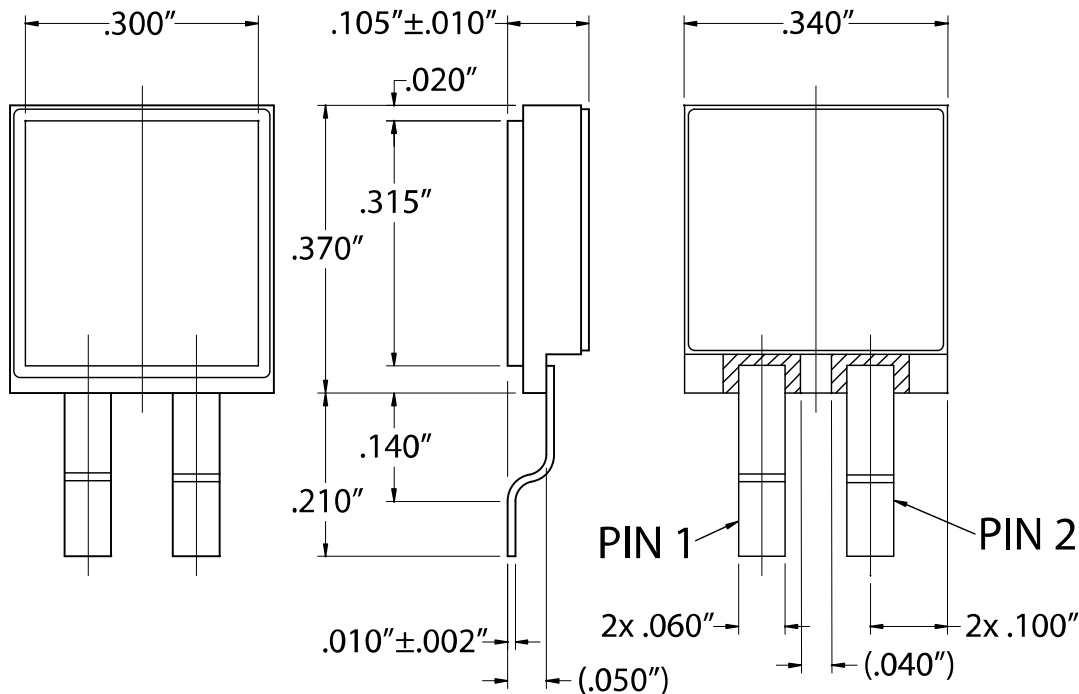
Electrical Characteristics ^{1/}		Symbol	Max	Units
Instantaneous Forward Voltage Drop (I _F = 10Adc, Pulse) (I _F = 20Adc, Pulse)	T _A = 25 °C	V _{F1}	1.40	V _{DC}
	T _A = 25 °C	V _{F2}	1.60	
Instantaneous Forward Voltage Drop (I _F = 20Adc, Pulse)	T _A = -55 °C	V _{F3}	1.70	V _{DC}
Reverse Leakage Current (100% of rated V _R , Pulse)	T _A = 25 °C	I _{R1}	50	μA
	T _A = 100 °C	I _{R2}	5	mA
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, T _A = 25°C)		t _{RR}	35	nsec
Junction Capacitance (V _R = 10V _{DC} , T _A = 25°C, f = 1MHz)		C _J	150	pF

Notes: ^{1/} Both Legs Tied Together.

PIN ASSIGNMENT			
PACKAGE	Pin 1	Pin 2	Pin 3 (Case)
CERPACK	Anode	Anode	Cathode

CERPACK

Outline:



Tolerances

Unless Specified- .XX ± .020"

.XXX ± .010"

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