



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

**SDR620-28
THRU
SDR622-28**

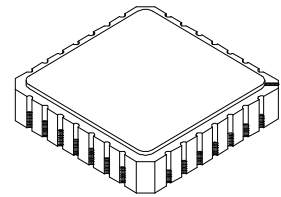
DESIGNER'S DATA SHEET

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
- TX, TXV, and Space Level Screening Available.

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

28 PIN CLCC



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage ^{1/}	SDR620-28	V_{RRM}	100	Volts
	SDR621-28	V_{RWM}	150	
	SDR622-28	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	20	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$) ^{2/}		I_{FSM}	100	Amps
Operating & Storage Temperature		Top & Tstg	-65 to +200	$^\circ\text{C}$
Maximum Thermal Resistance Junction to Case, ^{2/}		R_{qJL}	6.6	$^\circ\text{C/W}$

^{1/} Higher Voltage class available

^{2/} Package Limited

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

DATA SHEET #: RH0069B

DOC



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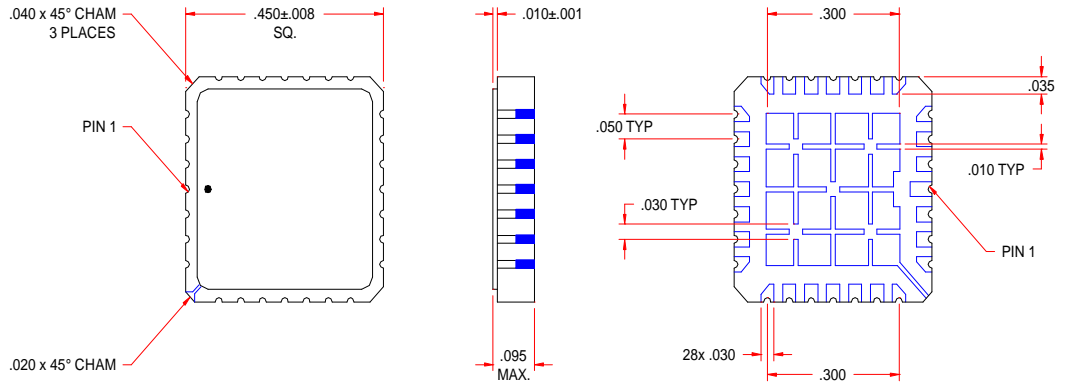
Electrical Characteristics	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (IF=10Adc, TA = 25°C, 300 μsec pulse) ^{1/} (IF=20Adc, TA = 25°C, 300 μsec pulse) ^{1/}	V _{F1}	—	1.1 1.3	Volts
Instantaneous Forward Voltage Drop (IF= 10Adc, TA = 100°C, 300 μsec pulse) ^{1/} (IF= 10Adc, TA = -55°C, 300 μsec pulse) ^{1/}	V _{F2}	—	1.0 1.2	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	—	225	pF
Reverse Recovery Time (I _F = 0.5A, I _R = 1A, I _{RR} = 0.25A, TA = 25°C)	t _{rr}	—	35	nsec

CASE OUTLINE: 28 PIN LCC

Pin 1, 15-28: Anode

Pin 5-11: Cathode

Pin 2, 3, 13, 14: N/C



^{1/} For best results connect pins 1, 15-28 together and pins 5-11 together in operation.

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