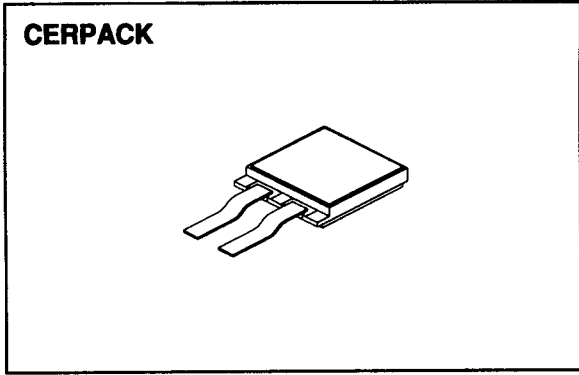


**SDR627G  
 thru  
 SDR628G**

**Designer's Data Sheet**

**20 AMPS  
 700-800 VOLTS  
 60 nsec  
 ULTRA FAST  
 RECTIFIER**

- FEATURES:**
- Ultrafast Recovery: 60 nsec Maximum
  - High Surge Rating
  - Low Reverse Leakage Current
  - Low Junction Capacitance
  - Hermetically Sealed Surface Mount Package
  - Gold Eutectic Die Attach available
  - Ultrasonic Aluminum Wire Bonds
  
  - TX, TXV and Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
<b>Peak Repetitive Reverse and DC Blocking Voltage</b>  <div style="text-align: center;">SDR627G SDR628G</div>	VRRM  VRWM  VR	700 800	Volts
<b>Average Rectified Forward Current</b> (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	20	Amps
<b>Peak Surge Current</b> (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 1	IFSM	200	Amps
<b>Operating and storage temperature</b>	Top & Tstg	-65 to +200	°C
<b>Maximum Thermal Resistance</b> Junction to Case	RθJC	1.3	°C/W

note 1 Both legs tied together

**SDR627G  
thru  
SDR628G**

PRELIMINARY



**SOLID STATE DEVICES, INC**

14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

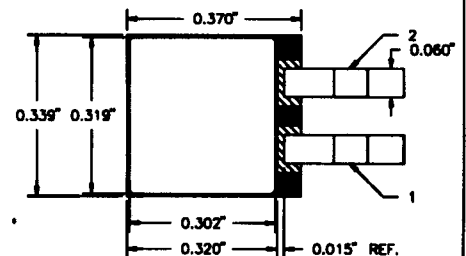
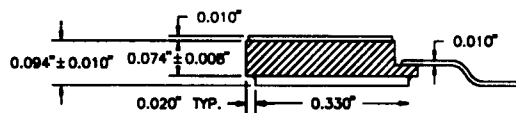
**ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300ms Pulse) (IF = 20 Adc, TA=25°C, 300ms Pulse)	VF	1.25 1.50	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= 100°C, 300ms Pulse) (IF = 10 Adc, TA=-55°C, 300ms Pulse)	VF	1.17 1.35	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300ms pulse minimum)	IR	50	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300ms pulse minimum)	IR	5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz )	CJ	70	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	60	nsec

**CASE OUTLINE: CERPACK**

**PIN OUT:**

**PIN 1: ANODE**  
**PIN 2: ANODE**  
**BOTTOM: CATHODE**



**TYPICAL OPERATING CURVES**  
TA=25°C Unless otherwise specified

