

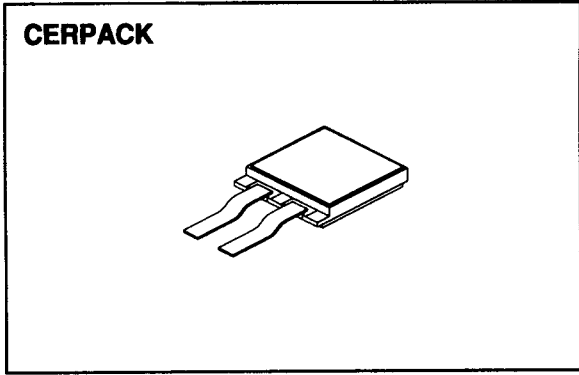
**SDR627G
 thru
 SDR628G**

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

note 1 Both legs tied together

SDR627G thru SDR628G

PRELIMINARY



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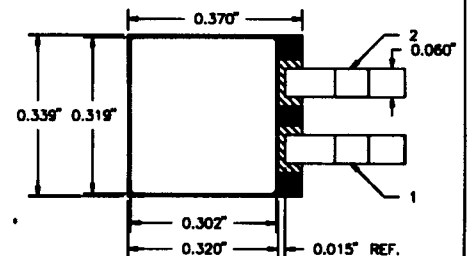
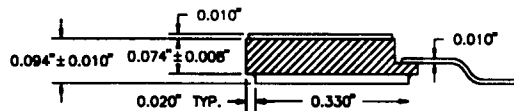
ELECTRICAL CHARACTERISTICS

| 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

