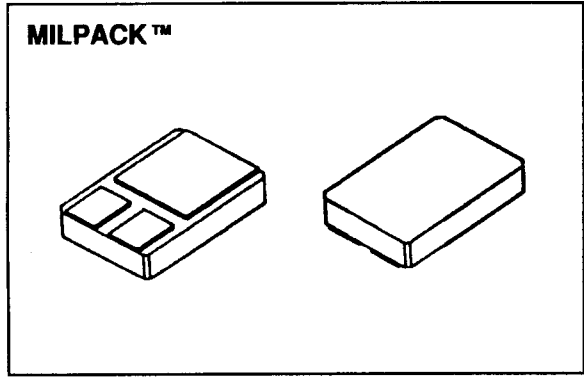


**SDR953  
 thru  
 SDR955**

**Designer's Data Sheet**

- FEATURES:**
- Hyper Fast Recovery: 35 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

**50 AMP  
 300-500 VOLTS  
 35 nsec  
 HYPER FAST  
 RECTIFIER**



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	300	Volts
	VRWM	400	
	VR	500	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	50	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)note 1	IFSM	800	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	RθJC	0.8	°C/W

pin 1 connect pins 2 & 3 together

# SDR953 thru SDR955

PRELIMINARY



SOLID STATE DEVICES, INC

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

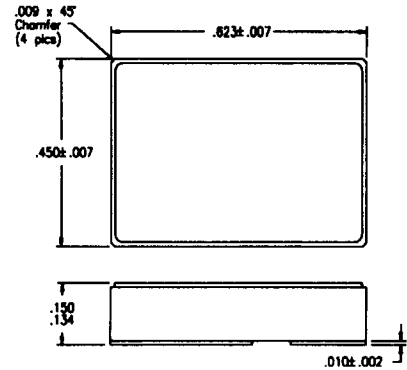
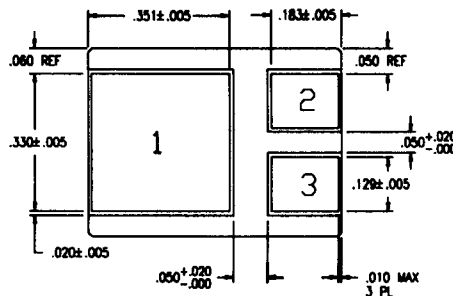
## ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA=25°C, 300µs Pulse) note 1 (IF = 50 Adc, TA=25°C, 300µs Pulse) note 1	<b>VF</b>	1.20 1.45	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA= 100°C, 300µs Pulse) (IF = 25 Adc, TA= - 55°C, 300µs Pulse)	<b>VF</b>	1.10 1.30	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300µs pulse minimum)	<b>IR</b>	100	<b>µA</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300µs pulse minimum)	<b>IR</b>	10	<b>mA</b>
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	<b>CJ</b>	250	<b>pf</b>
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	<b>trr</b>	35	<b>nsec</b>

## CASE OUTLINE: MILPACK

**PIN 1: CATHODE**  
**PIN 2: ANODE**  
**PIN 3: ANODE**

**NOTE 1:**  
Connect pins 2 & 3  
in application.



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

