

Designer's Data Sheet

FEATURES:

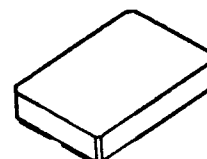
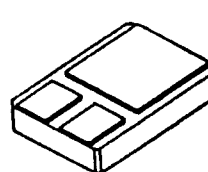
- Hyper Fast Recovery: 35 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Surface Mount Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds

- TX, TXV and Space Level Screening Available

**SDR953
 thru
 SDR955**

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

MILPACK™



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR953 SDR954 SDR955	VRRM VRWM VR	 300 400 500	 Volts
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

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

DATA SHEET#: RH0027 A

MED

SDR953 thru SDR955

PRELIMINARY



SOLID STATE DEVICES, INC

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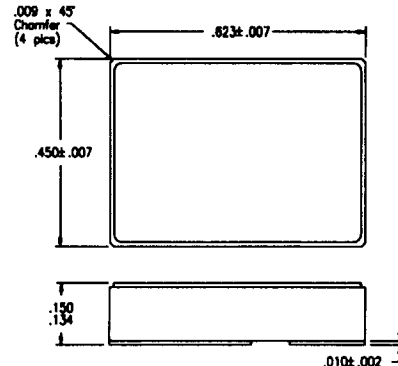
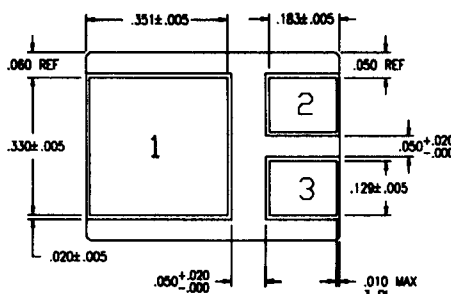
ELECTRICAL CHARACTERISTICS

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

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

