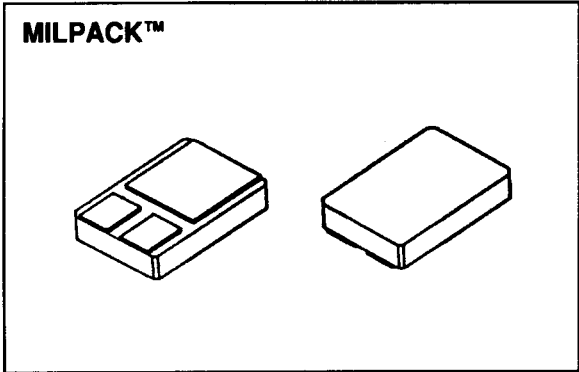


**SDR680
 thru
 SDR682**

**80 AMP
 100-200 VOLTS
 35 nsec
 HYPER FAST
 RECTIFIER**



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 Power 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, note 1	VRRM	100	Volts
	VRWM	150	
	VR	200	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 2	IO	80	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 2	IFSM	1000	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 2	RθJC	1.0	°C/W

Note 1 Higher voltage class available
 Note 2 Both legs tied together

SDR680 thru SDR682

PRELIMINARY



SOLID STATE DEVICES, INC

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

ELECTRICAL CHARACTERISTICS

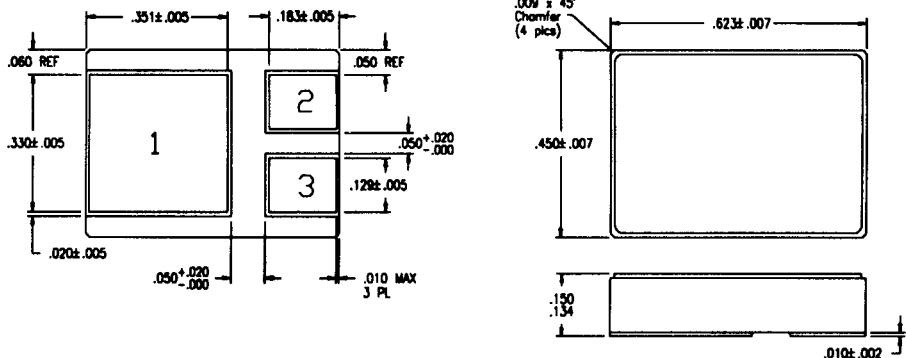
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 40 Adc, TA=25°C, 300µs Pulse) note 1 (IF = 80 Adc, TA=25°C, 300µs Pulse) note 1	VF	1.0 1.2	Vdc
Instantaneous Forward Voltage Drop (IF = 40 Adc, TA= 100°C, 300µs Pulse) note 1 (IF = 40 Adc, TA= - 55°C, 300µs Pulse) note 1	VF	0.9 1.1	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300µs pulse minimum)	IR	40	µA
Reverse Leakage Current (Rated VR, TA=100°C, 300µs pulse minimum)	IR	4	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	600	pf
Reverse Recovery Time (IF=1 A, IR=1 A, IRR= 100mA, TA=25°C)	t_{rr}	35	nsec

CASE OUTLINE: MILPACK

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

Note 1:

For best results connect pin 2 & 3 together in application.



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

