

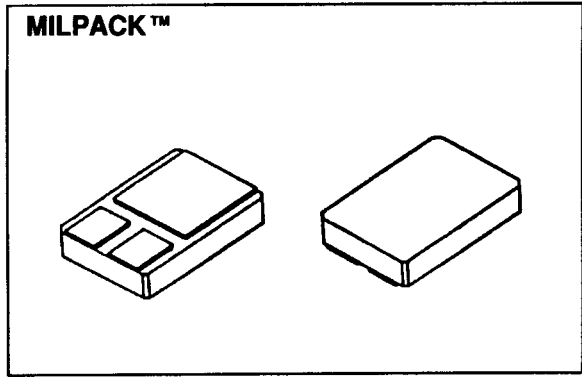
**SDR958
 thru
 SDR9511**

Designer's Data Sheet

**50 AMP
 800-1100 VOLTS
 80 nsec
 ULTRA FAST
 RECTIFIER**

- FEATURES:**
- Ultrafast Recovery: 60 nsec typical
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Forward Voltage Drop
 - Low Junction Capacitance
 - Hermetic Power 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	VRRM	800	Volts
SDR958	VRWM	900	
SDR959		1000	
SDR9510 SDR9511	VR	1100	
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	50	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C)	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, note 1	RθJC	1.0	°C/W

note 1 Pins 2&3 connected

SDR958 thru SDR9511

PRELIMINARY



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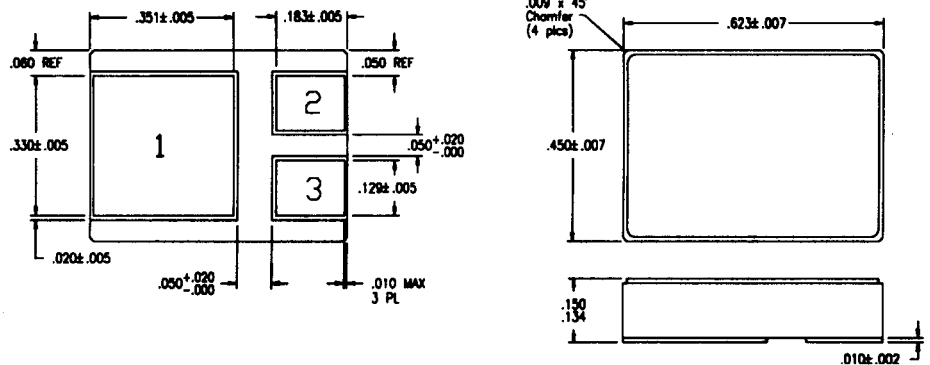
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=25°C, 300ms Pulse) note 1 (IF = 50 Adc, TA=25°C, 300ms Pulse) note 1	VF	1.40 1.55	Vdc
Instantaneous Forward Voltage Drop (IF = 25 Adc, TA=100°C, 300ms Pulse) note 1 (IF = 25 Adc, TA= - 55°C, 300ms Pulse) note 1	VF	1.30 1.50	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300ms pulse minimum)	IR	100	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300ms pulse minimum)	IR	10	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	150	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	t_{rr}	80	nsec

CASE OUTLINE: MILPACK

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

Note 1:
Connect
Pin 2 & 3
together.



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

