

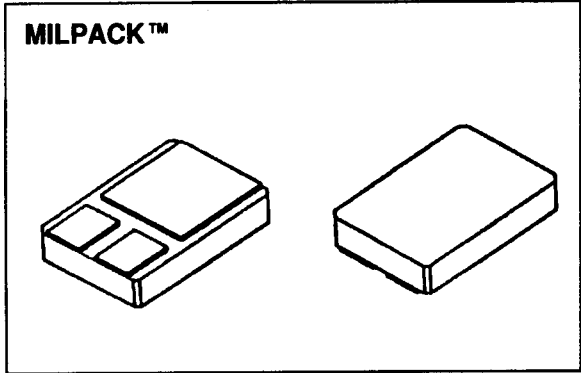
**SDR936
 thru
 SDR939**

Designer's Data Sheet

- FEATURES:**
- Soft Recovery Diode
 - Ultrafast Recovery: 80 nsec Maximum
 - Faster recovery versions available
 - 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

**30 AMP
 600-900 VOLTS
 80 nsec
 ULTRA FAST
 RECTIFIER**



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM	600	Volts
SDR936	VRWM	700	
SDR937		800	
SDR938	VR	900	
SDR939			
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	30	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 1	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.45	°C/W

Note 1: Connect pin 2 and 3 together

SDR936 thru SDR939

PRELIMINARY



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ELECTRICAL CHARACTERISTICS

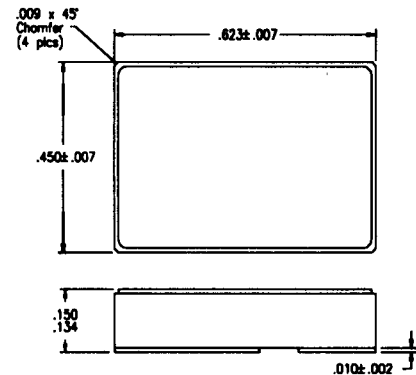
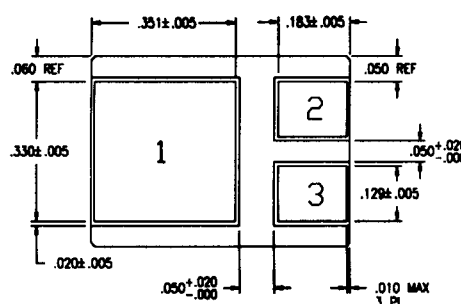
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (note 1) (IF = 15 Adc, TA=25°C, 300ms Pulse) (IF = 30 Adc, TA=25°C, 300ms Pulse)	VF	1.2 1.3	Vdc
Instantaneous Forward Voltage Drop (note 1) (IF = 15 Adc, TA=100°C, 300ms Pulse) (IF = 15 Adc, TA= - 55°C, 300ms Pulse)	VF	1.1 1.3	Vdc
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	100	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	t _{rr}	80	nsec

CASE OUTLINE: MILPACK

PIN OUT:

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

Note 1:
Connect Pin 2 and 3
together for
best VF performance



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

