

Designer's Data Sheet

FEATURES:

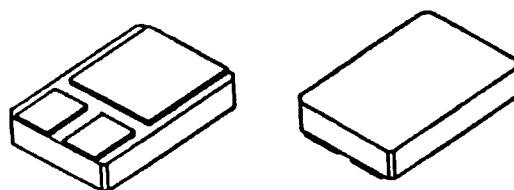
- Hyper Fast Recovery: 35 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Surface Mount Power Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds

- TX, TXV and Space Level Screening Available

**SDR623CT
thru
SDR625CT**

**40 AMP
300-500 VOLTS
35 nsec
HYPER FAST
CENTERTAP RECTIFIER**

MILPACK™



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR623CT SDR624CT SDR625CT	VRRM VRWM VR	300 400 500	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) note 1	IO	40	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, each individual diode Junction to Case, note 1	ReJC	2.3 1.3	°C/W

note 1 Both legs tied 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#: RH0055 A

MED

SDR623CT thru SDR625CT

PRELIMINARY

SSDI
SOLID STATE DEVICES, INC

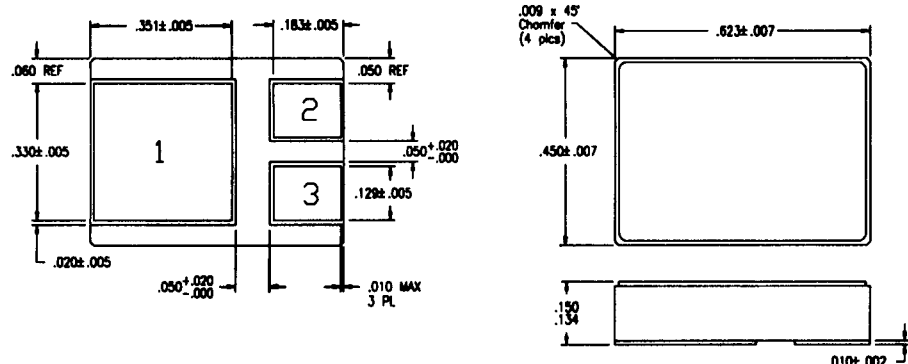
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300μs Pulse) (IF = 20 Adc, TA=25°C, 300μs Pulse)	VF	1.35 1.50	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= 100°C, 300μs Pulse) (IF = 10 Adc, TA= -55°C, 300μs Pulse)	VF	1.25 1.45	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300μs pulse minimum)	IR	50	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300μs pulse minimum)	IR	5	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)	trr	35	nsec

CASE OUTLINE: MILPACK

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

