

**SDR647CT
thru
SDR648CT**

Designer's Data Sheet

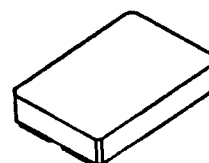
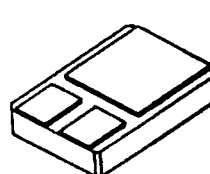
FEATURES:

- Ultrafast Recovery: 60 nsec Maximum
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Power Surface Mount Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds

- TX, TXV and Space Level Screening Available

**40 AMPS
700-800 VOLTS
60 nsec
ULTRA FAST
CENTERTAP RECTIFIER**

MILPACK™



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage SDR647CT SDR648CT	VRRM VRWM VR	700 800	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	400	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	RθJC	4.2 1.75	°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#: RU0087 A

MED

SDR647CT thru SDR648CT

PRELIMINARY



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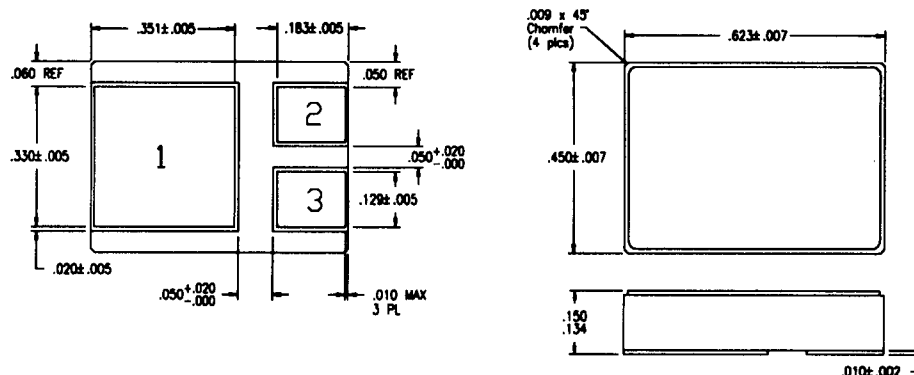
ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA=25°C, 300ms Pulse) (IF = 20 Adc, TA=25°C, 300ms Pulse)	VF	1.2 1.4	Vdc
Instantaneous Forward Voltage Drop (IF = 10 Adc, TA= 100°C, 300ms Pulse) (IF = 10 Adc, TA=-55°C, 300ms Pulse)	VF	1.12 1.30	Vdc
Reverse Leakage Current (Rated VR, TA=25°C, 300ms pulse minimum)	IR	50	μA
Reverse Leakage Current (Rated VR, TA=100°C, 300ms pulse minimum)	IR	5	mA
Junction Capacitance (VR = 10 Vdc, TA=25°C, f= 1 MHz)	CJ	70	pf
Reverse Recovery Time (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	trr	60	nsec

CASE OUTLINE: MILPACK

PIN OUT:

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

