



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SDR936CT/3
thru
SDR939CT/3**

Designer's Data Sheet

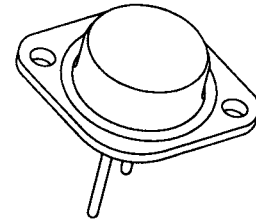
FEATURES:

- Soft Recovery Diode
- Ultrafast Recovery: 80 nsec Maximum
- Available in faster recovery versions
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed 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
CENTERTAP RECTIFIER**

TO-3



MAXIMUM RATINGS

| RATING | SYMBOL | VALUE | UNIT |
|---|--|-------------|-------|
| Peak Repetitive Reverse and DC Blocking Voltage | VRRM | 600 | Volts |
| | VRWM | 700 | |
| | SDR936CT/3 SDR937CT/3 SDR938CT/3 SDR939CT/3 | 800 | |
| | VR | 900 | |
| Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C) | IO | 60 | Amps |
| Peak Surge Current (per leg) (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, each individual diode Junction to Case, note 1 | RθJC | 1.6 | °C/W |
| | | 1.0 | |

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#: RU0103 A

MED

**SDR936CT/3
thru
SDR939CT/3**

PRELIMINARY



SOLID STATE DEVICES, INC

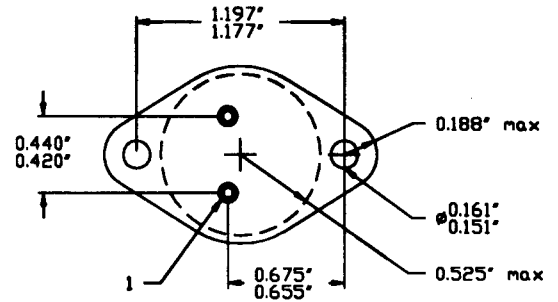
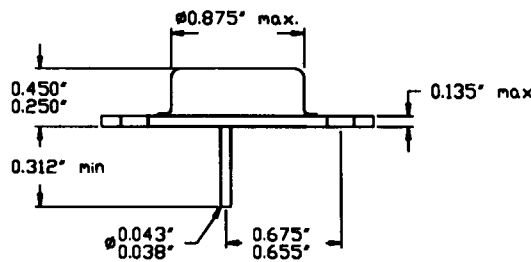
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

ELECTRICAL CHARACTERISTICS (Per Leg)

| CHARACTERISTICS | SYMBOL | MAXIMUM | UNIT |
|---|------------|------------|-------------|
| Instantaneous Forward Voltage Drop (IF = 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 (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) | trr | 80 | nsec |

CASE OUTLINE: TO-3

**PIN 1: ANODE 1
CASE: CATHODE
PIN 3: ANODE 2**



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

