



PRELIMINARY

SOLID STATE DEVICES, INC

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

**SDR936CTM&Z
thru
SDR939CTM&Z**

Designer's Data Sheet

FEATURES:

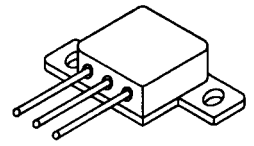
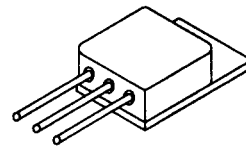
- Soft Recovery Diode
- Ultrafast Recovery: 80 nsec Maximum
- Available in faster recovery versions
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- Ceramic Seals for improved hermeticity available

- TX, TXV and Space Level Screening Available

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

TO-254

TO-254Z



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM VRWM VR	600 700 800 900	Volts
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	500*	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	1.3 0.75	°C/W

note 1 Both legs tied together
* Available with higher surge capability

NOTE: All specifications are subject to change without notification.
SCD's for these devices should be reviewed by SSDI prior to release.

DATA SHEET#: RU0101 A

MED

**SDR936CTM&Z
thru
SDR939CTM&Z**

PRELIMINARY



SOLID STATE DEVICES, INC

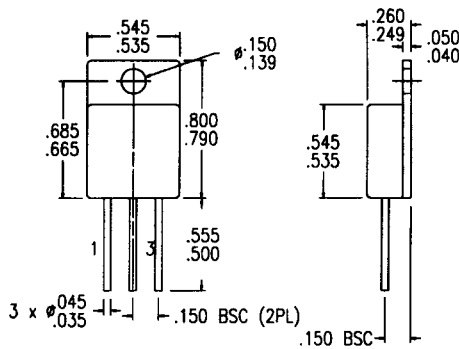
14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

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	1.25 1.40	Vdc
Instantaneous Forward Voltage Drop (IF = 15 Adc, TA=100°C, 300ms Pulse) (IF = 15 Adc, TA= - 55°C, 300ms Pulse)	VF	1.15 1.35	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

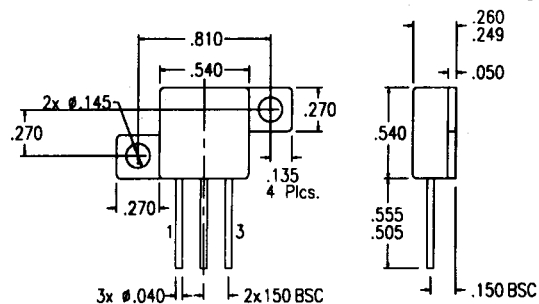
CASE OUTLINE: TO-254

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



CASE OUTLINE: TO-254Z

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



TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

