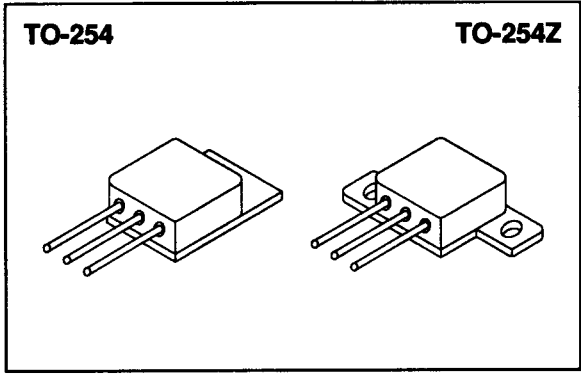


**SDR936CTM&Z  
 thru  
 SDR939CTM&Z**

**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**



**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

# SDR936CTM&Z thru SDR939CTM&Z

PRELIMINARY



SOLID STATE DEVICES, INC

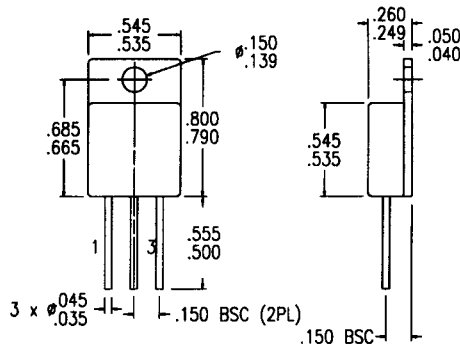
14849 Firestone Boulevard · La Mirada, CA 90638  
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

## ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 15 Adc, TA=25°C, 300ms Pulse) (IF = 30 Adc, TA=25°C, 300ms Pulse)	<b>VF</b>	1.25 1.40	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> (IF = 15 Adc, TA=100°C, 300ms Pulse) (IF = 15 Adc, TA= - 55°C, 300ms Pulse)	<b>VF</b>	1.15 1.35	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300ms pulse minimum)	<b>IR</b>	100	<b>µA</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300ms pulse minimum)	<b>IR</b>	10	<b>mA</b>
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	<b>CJ</b>	100	<b>pf</b>
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	<b>trr</b>	80	<b>nsec</b>

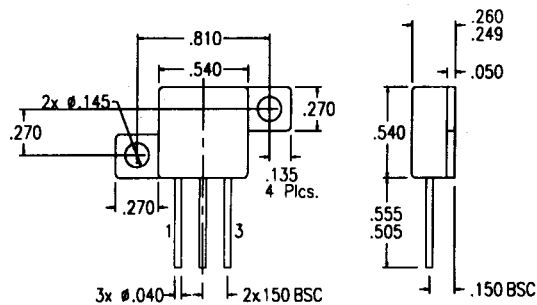
### CASE OUTLINE: TO-254

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

