Solid State Devices, Inc.
14830 Valley View Blvd * La Mirada, CA 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SDR966CTN & SDR966CTP thru SDR969CTN & SDR969CTP

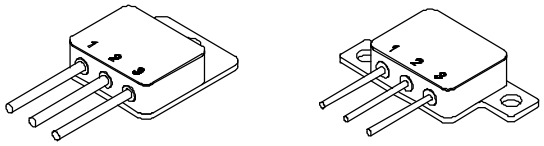
DESIGNER'S DATA SHEET

Features:

- Soft Recovery Diode
- Ultra Fast Recovery: 80 nsec Maximum
- Faster Recovery Versions Available
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach Available
- Ultrasonic Aluminum Wire Bond
- Ceramic Seals for Improved Hermeticity Available
- Common Anode and Doubler Versions Available
- TX, TXV, Space Level Screening Available. Consult Factory.

60 AMP
600 - 900 Volts
80 nsec
Ultra Fast Recovery
Centertap Rectifier

TO-258 (N) **TO-259 (P)**



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SDR966CTN & SDR966CTP** **SDR967CTN & SDR967CTP** **SDR968CTN & SDR968CTP** **SDR969CTN & SDR969CTP**	V_{RRM} V_{RWM} V_R	600 700 800 900	**Volts**
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, T_A = 25ºC)1/		**Io**	60	**Amps**
Peak Surge Current (Per Leg) (8.3 ms Pulse, Half Sine Wave Superimposed on Io, Allow Junction to Reach Equilibrium Between Pulses, T_A = 25ºC)		I_{FSM}	500*	**Amps**
Operating & Storage Temperature		**Top & Tstg**	-65 to +200	**ºC**
Maximum Thermal Resistance Junction to Case, Each Individual Diode Junction to Case 1/		R_{qJE}	1.3 0.7	**ºC/W**

Notes:
1/ Both Legs Tied Together
***** Available with Higher Surge Rating

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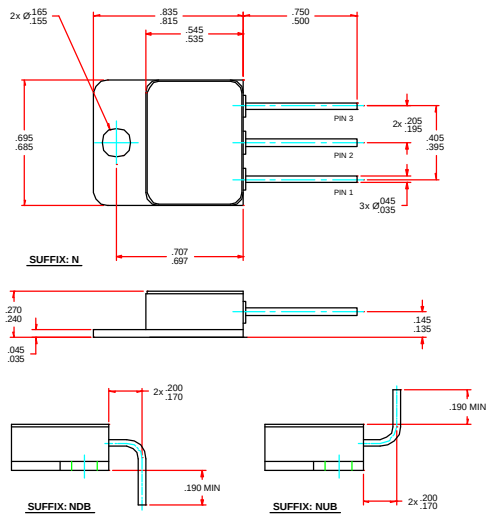
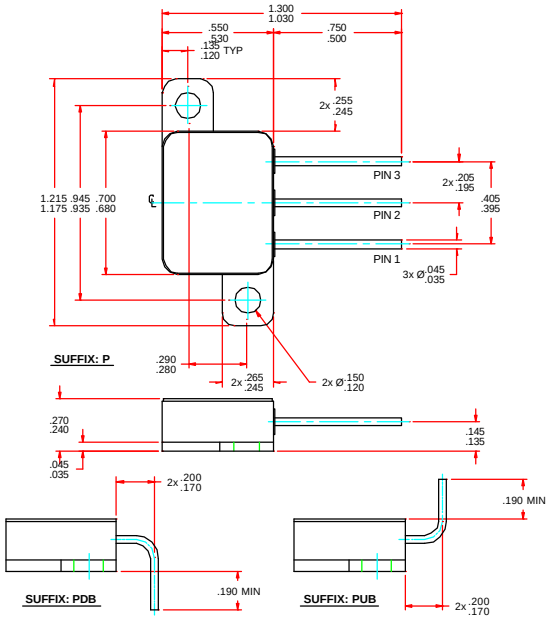
Electrical Characteristics (Per Leg)		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T_A = 25ºC, 300 µs Pulse)	I_F = 15A I_F = 30A	V_{F1} V_{F2}	— —	1.20 1.35	**Volts**
Instantaneous Forward Voltage Drop (I_F = 15A, 300 µs Pulse)	T_A = 100ºC T_A = -55ºC	V_{F3} V_{F4}	— —	1.10 1.30	**Volts**
Reverse Leakage Current (Rated V_R, T_A = 25ºC, 300 µs Pulse minimum)		I_{R1}	—	100	**mA**
Reverse Leakage Current (Rated V_R, T_A = 100ºC, 300 µs Pulse minimum)		I_{R2}	—	10	**mA**
Junction Capacitance (V_R = 10 Vdc, T_A = 25ºC, f = 1MHz)		C_J	—	100	**pF**
Reverse Recovery Time **(I_F = 500 mA, I_R = 1A, I_{RR} = 0.25A)**	T_A = 25ºC	t_{rr}	— —	80	**nsec**

Case Outline:
TO-258 (N)
Pin 1: Anode 1
Pin 2: Cathode
Pin 3: Anode 2



Case Outline:
TO-259 (P)
Pin 1: Anode 1
Pin 2: Cathode
Pin 3: Anode 2



TYPICAL OPERATING CURVES
T_A = 25°C Unless Otherwise Specified