Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SDR998CTN&P thru SDR9912CTN&P

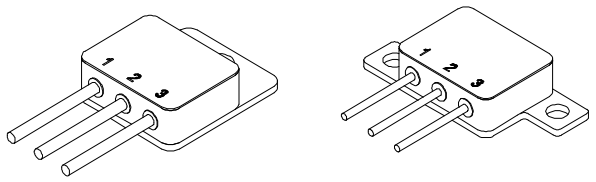
DESIGNER'S DATA SHEET

Features:

- Ultra Fast Recovery: 60 nsec typical
- High Surge Rating
- Low Reverse Leakage Current
- Low Forward Voltage Drop
- Low Junction Capacitance
- Hermetically Sealed Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- Ceramic Seals for improved hermeticity available
- Available in Common Anode and Doubler versions:
  SDR998CAN&P-SDR9912CAN&P
  SDR998DN&P-SDR9912DN&P
- TX, TXV, Space Level Screening Available Consult Factory.

100 AMP
800 -1200 Volts
80 nsec
ULTRA FAST COMMON CATHODE RECTIFIER

TO-258 **TO-259**



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SDR998CTN&P**	V_{RRM}	800	**Volts**
	SDR999CTN&P		900	
	SDR9910CTN&P	V_{RWM}	1000	
	SDR9911CTN&P		1100	
	SDR9912CTN&P	V_R	1200	
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, T_A = 25ºC)note 1, 2		**Io**	60	**Amps**
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on Io, Allow Junction to Reach Equilibrium Between Pulses, T_A = 25ºC)note 2		I_{FSM}	550	**Amps**
Operating & Storage Temperature		**Top & Tstg**	-65 to +200	**ºC**
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, note 1		R_{qJE}	0.9 0.5	**ºC/W**

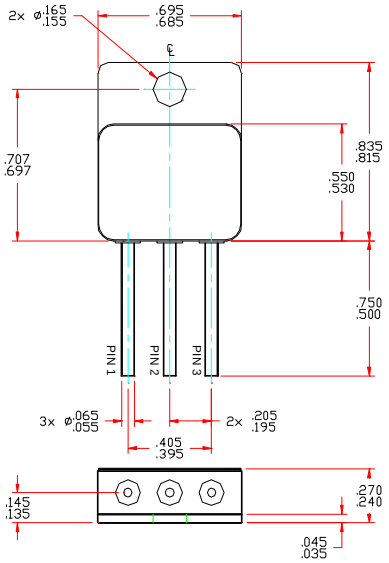
Note 1: Both legs tied together
Note 2: Package limited

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Electrical Characteristics		Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop (T_A = 25ºC, 300 µsec pulse)	I_F = 25Adc I_F = 50Adc	V_{F1}	—	1.95 2.25	**Volts**
Instantaneous Forward Voltage Drop (T_A = -55ºC, 300 µsec pulse) (T_A = 100ºC, 300 µsec pulse)	I_F = 25Adc I_F = 25Adc	V_{F2}	—	1.85 2.00	**Volts**
Reverse Leakage Current (Rated V_R, T_A = 25ºC, 300 µsec pulse minimum)		I_{R1}	—	100	**mA**
Reverse Leakage Current (Rated V_R, T_A = 100ºC, 300 µsec 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
Pin1: Cathode
Pin2: Anode
Pin3: Anode



Case Outline: TO-259
Pin1: Cathode
Pin2: Anode
Pin3: Anode

