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

SDR998CT/3 thru SDR9912CT/3

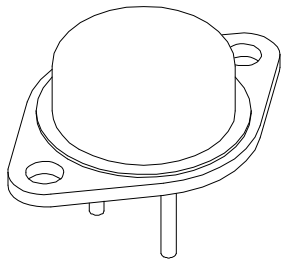
DESIGNER'S DATA SHEET

Features:

- UltraFast 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
- TX, TXV, Space Level Screening Available. Consult Factory.

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

TO-3



Maximum Ratings		Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	**SDR998CT/3** **SDR999CT/3** **SDR9910CT/3** **SDR9911CT/3** **SDR9912CT/3**	V_{RRM} V_{RWM} V_R	800 900 1000 1100 1200	**Volts**
Average Rectified Forward Current (Resistive Load, 60 Hz Sine Wave, T_A = 25ºC) note 1		**Io**	100	**Amps**
Peak Surge Current (8.3 ms Pulse, Half Sine Wave , T_A = 25ºC, per leg)		I_{FSM}	600	**Amps**
Operating & Storage Temperature		**Top & Tstg**	-65 to +200	**ºC**
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, note 1		$R_{\theta JE}$	1.1 0.75	**ºC/W**

Note 1: Both legs in parallel

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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}	—	1.85 2.1	**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}	—	1.75 1.9	**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-3
Pin1: Cathode
Pin2: Anode 1
Pin3: Anode 2