



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SDR950/61 thru SDR952/61

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SDR95 _____

_____ **L Screening ^{2/}**
 _____ = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

_____ **Package Type**
 /61 = TO-61

_____ **Device Type (VRWM)**
 0 = 100V
 1 = 150V
 2 = 200V

**60 Amp
HYPER FAST RECTIFIER**
100 – 200 Volts
35 nsec

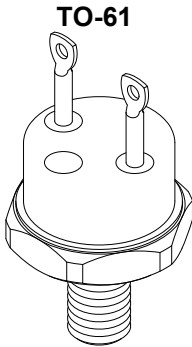
- FEATURES:**
- Hyper Fast Reverse Recovery Time: 35 nsec Max
 - High Surge Rating
 - Low Reverse Leakage Current
 - Low Junction Capacitance
 - Hermetically Sealed Package
 - Gold Eutectic Die Attach Available
 - Ultrasonic Aluminum Wire Bonds
 - Isolated Case (Stud)
 - TX, TXV, and S-Level Screening Available ^{2/}

MAXIMUM RATINGS^{3/}

RATING		SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage DC Blocking Voltage	SDR950/61	V_{RRM}	100	Volts
	SDR951/61	V_{RWM}	150	
	SDR952/61	V_R	200	
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 25^\circ\text{C}$)		I_O	60	Amps
Peak Surge Current (8.3 ms pulse, half sinewave, $T_A = 25^\circ\text{C}$)		I_{FSM}	450*	Amps
Operating & Storage Temperature		T_{OP} and T_{STG}	-65 to +200	$^\circ\text{C}$
Maximum Thermal Resistance	Junction to Case	$R_{\theta JC}$	0.75	$^\circ\text{C/W}$

NOTES:

- ^{1/} For ordering information, price, and availability - contact factory.
^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.
^{3/} Unless otherwise specified, all electrical characteristics @25°C.
 *Package limited





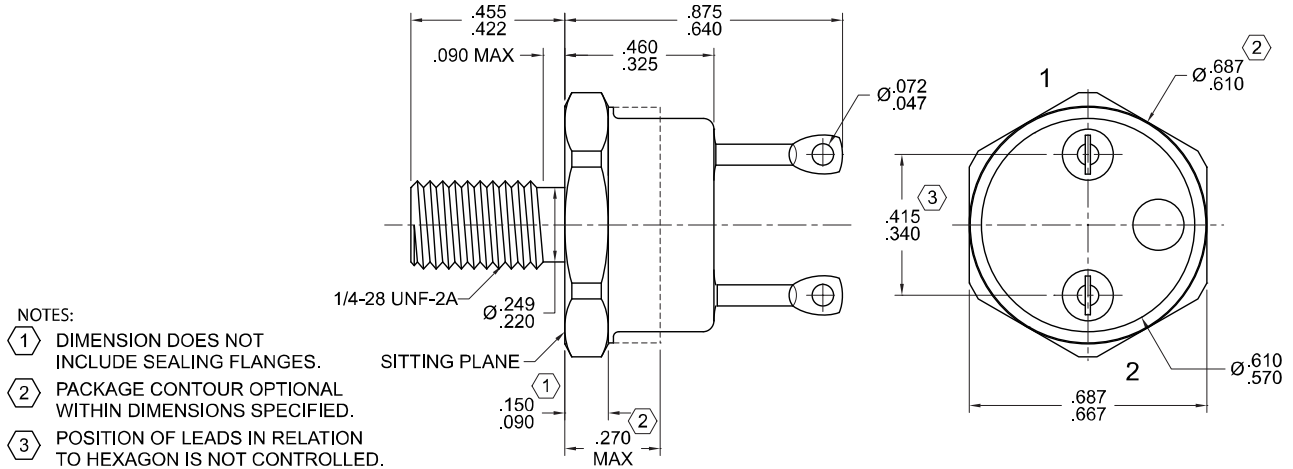
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ELECTRICAL CHARACTERISTICS ^{3/}	SYMBOL	MAX	UNIT
Instantaneous Forward Voltage Drop ($I_F = 25\text{A}$ dc, $T_A = 25^\circ\text{C}$, 300 μs pulse) ($I_F = 50\text{A}$ dc, $T_A = 25^\circ\text{C}$, 300 μs pulse)	V_{F1} V_{F2}	1.05 1.25	Vdc
Instantaneous Forward Voltage Drop ($I_F = 25\text{A}$ dc, $T_A = 100^\circ\text{C}$, 300 μs pulse) ($I_F = 25\text{A}$ dc, $T_A = -55^\circ\text{C}$, 300 μs pulse)	V_{F3} V_{F4}	0.95 1.20	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	I_{R1}	100	μA dc
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	I_{R2}	10	mAdc
Junction Capacitance ($V_R = 10\text{V}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)	C_J	450	pf
Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$, $T_A = 25^\circ\text{C}$)	t_{RR}	35	nsec

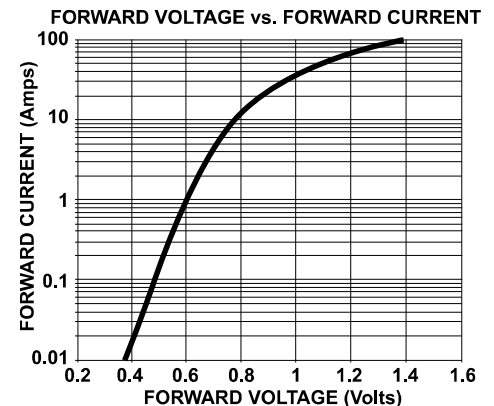
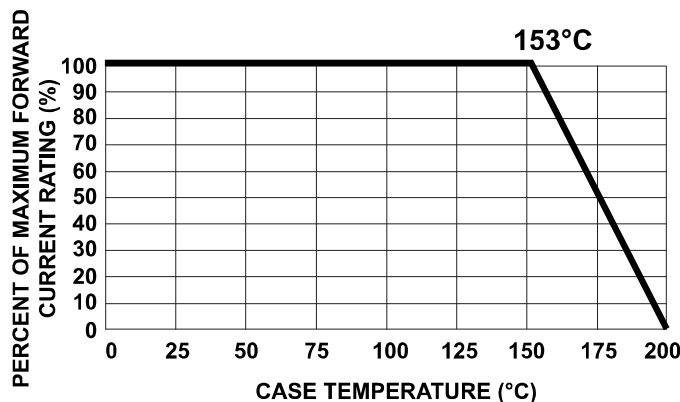
Case Outline: 2 Pin TO-61



PIN 1: ANODE
PIN 2: CATHODE

TYPICAL OPERATING CURVES

$T_A = 25^\circ\text{C}$ unless otherwise specified



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

DATA SHEET #: RH0045C

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