

SDR952N & P THROUGH SDR955N & P

75 AMP

ISOLATED FLAT PACK

HYPER FAST RECTIFIER

200 - 500 VOLTS

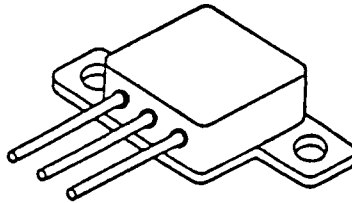
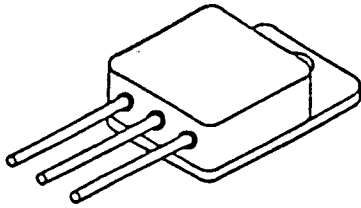
SSDI

14849 FIRESTONE BLVD.
LA MIRADA, CA 90638
TEL: (213) 921-9660
FAX: (213) 921-2396

CASE STYLE

T0-258(N)

T0-259(P)



FEATURES

- ▶ ISOLATED LOW PROFILE PACKAGE
- ▶ HYPER FAST RECOVERY 35 nsec MAX
- ▶ HIGHER VOLTAGES AVAILABLE
- ▶ 200 °C OPERATING, EUTECTIC DIE ATTACH
- ▶ REVERSE VOLTAGE TO 500 VOLTS
- ▶ LOW REVERSE LEAKAGE
- ▶ HERMETICALLY SEALED
- ▶ HIGH PEAK SURGE CURRENT 600 AMPS

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage (IR = 100uA)	VRM(rep) VR		Volts
SDR952N & P		200	
SDR953N & P		300	
SDR954N & P		400	
SDR955N & P		500	
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=25 °C)	IO	75	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibrium between Pulses)	IFM(rep)	150	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	750	Amps
Operating and Storage Temperature	TJ, Tstg	-65 to +200	°C

THERMAL CHARACTERISTICS

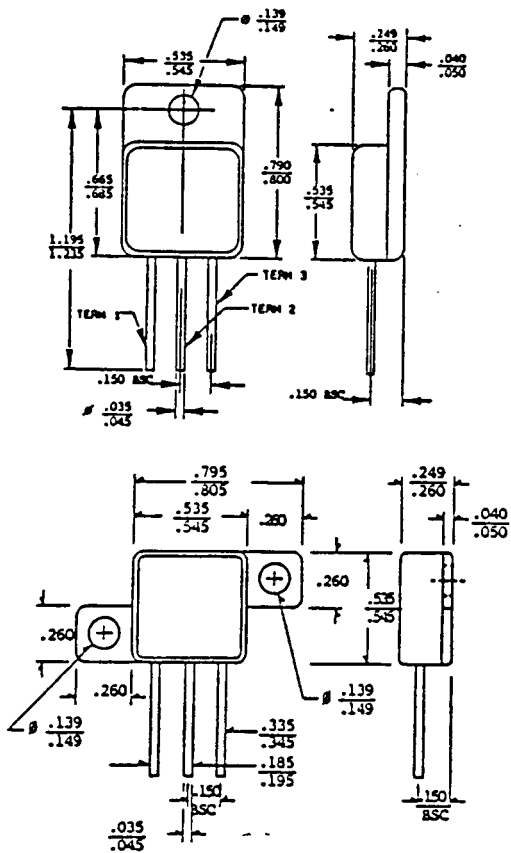
CHARACTERISTIC	SYMBOL	VALUE	UNIT
Thermal Resistance, Junction to Case, terminal 2 and 3 tied together	RθJC	0.8	°C/W

ELECTRICAL CHARACTERISTICS

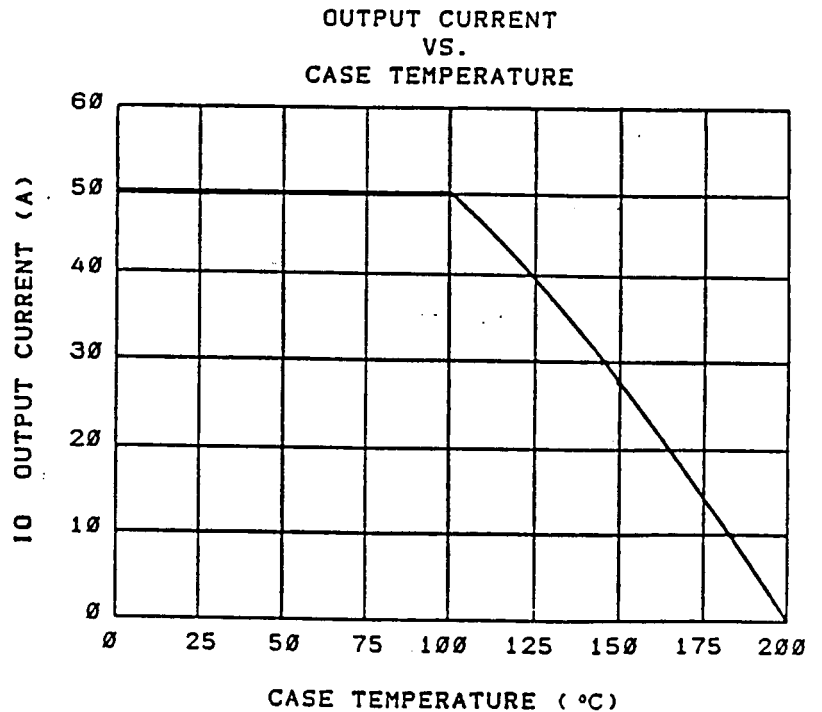
CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Instantaneous Forward Voltage Drop * ($I_F = 75\text{A dc}$, $T_A = 25^\circ\text{C}$)	V_F	1.7	Volts
Max Instantaneous Forward Voltage Drop * ($I_F = 75\text{A dc}$, $T_A = 100^\circ\text{C}$)	V_F	1.6	Volts
Max Reverse Leakage Current * ($V_R = 80\%$ Rated V_R , $T_A = 25^\circ\text{C}$)	I_R	100	$\mu\text{A dc}$
Max Reverse Leakage Current * ($V_R = 80\%$ Rated V_R , $T_A = 100^\circ\text{C}$)	I_R	10	mA dc
Max Junction Capacitance ($V_R = 10\text{V}$, $T_A = 25^\circ\text{C}$)	C_J	250	pf
Max Reverse Recovery Time ($I_F = 500\text{mA}$, $I_R = 1\text{A}$, $I_{RR} = 250\text{mA}$)	t_{rr}	35	ns

*) Pulse Width = 300 μs , Duty Cycle = 2 %.

PHYSICAL DIMENSIONS



TYPICAL OPERATING CURVES



SSDI

SOLID STATE DEVICES, INC.

14849 FIRESTONE BOULEVARD ♦ LA MIRADA, CA 90638

TELEPHONE: (213) 921-9660 ♦ FAX: (213) 921-2396