

**SDR811N & P AND SDR814N & P**

**100 AMP**  
**ISOLATED FLAT PACK**  
**HYPER FAST RECTIFIER**  
**500 AND 800 VOLTS**

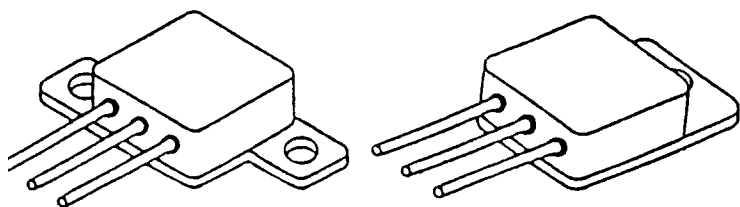
**SSDI**

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

**CASE STYLE**

T0-259(P)

T0-258(N)



**FEATURES**

- ▶ ISOLATED LOW PROFILE PACKAGE
- ▶ HYPER FAST RECOVERY 35nsec MAX
- ▶ 200 °C OPERATING, EUTECTIC DIE ATTACH
- ▶ REVERSE VOLTAGE TO 800 VOLTS
- ▶ LOW REVERSE LEAKAGE
- ▶ 10 OF 100 AMPS
- ▶ HERMETICALLY SEALED
- ▶ LOW THERMAL RESISTANCE 0.5 °C/W

**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage (IR = 100 μA)	VRM(rep) VR	500 800	Volts
Half Wave Rectified Forward Current Averaged Over Full Cycle (Resistive Load, 60Hz, Sine Wave, TC=25 °C)	IO	100	Amps
Peak Repetitive Forward Current (TC=55 °C, 8.3ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	IFM(rep)	200	Amps
Peak Surge Current (TC=55 °C, 8.3ms Pulse, Superimposed on Rated Current at Rated Voltage)	IFM(surge)	1000	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	0.5	°C/W

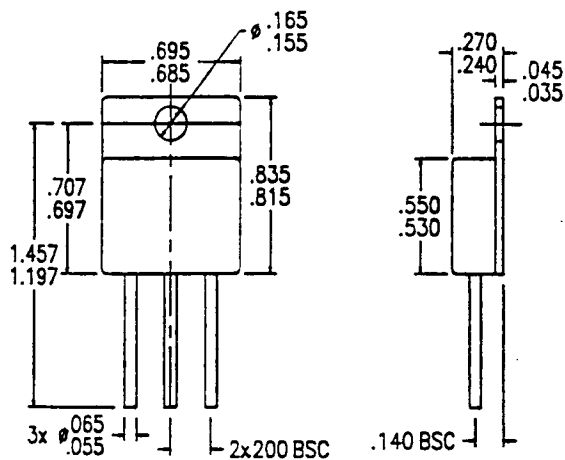
# ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	VALUE	UNITS
Max Instantaneous Forward Voltage Drop * (IF = 100mA, TA = 25 °C)	VF	1.5 1.7	Volts
SDR811N & P SDR814N & P			
Max Instantaneous Forward Voltage Drop * (IF = 100mA, TA = 100 °C)	VF	1.4 1.6	Volts
SDR811N & P SDR814N & P			
Max Reverse Leakage Current * (Rated VR, TA = 25 °C)	IR	200	μA
Max Reverse Leakage Current * (Rated VR, TA = 100 °C)	IR	20	mA
Max Junction Capacitance (VR = 10V, TA = 25 °C)	CJ	700	pf
Max Reverse Recovery Time (IF = 500mA, IR = 1A, IRR = 250mA)	trr	35 60	ns
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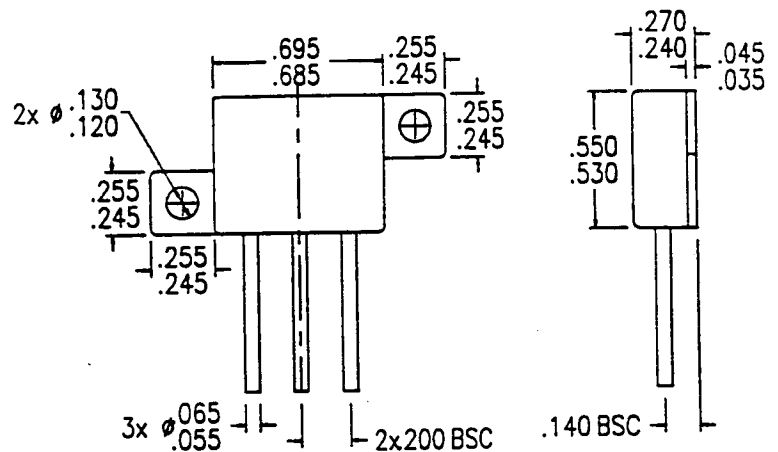
\*) Pulse Width = 300 μs, Duty Cycle = 2 %.

## PHYSICAL DIMENSIONS

TO-258 (N)



TO-259 (P)



**SSDI** SOLID STATE DEVICES, INC.

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