

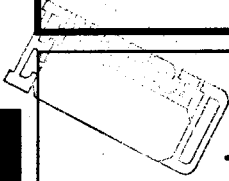


PRELIMINARY

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638  
 Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424

**15R6CTN&P**



**100 AMP  
 150 VOLTS  
 50nsec  
 EPID<sup>®</sup>  
 CENTERTAP RECTIFIER**

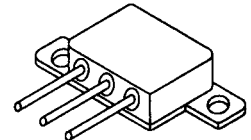
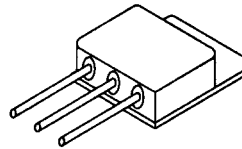
**Designer's Data Sheet**

**FEATURES:**

- EPID<sup>®</sup> High Voltage Schottky Process
- Minimal recovery time and leakage increase over temperature versus comparable rectifiers
- Lower capacitance than conventional Schottkys
- Hyper Fast Recovery: 50 nsec Maximum
- High Surge Rating
- Hermetically Sealed Power Package
- Gold Eutectic Die Attach available
- Ultrasonic Aluminum Wire Bonds
- Higher Voltage classes available
- Common anode configuration: 15R6CAN&P
- Doubler configuration: 15R6DN&P
- TX, TXV and Space Level Screening Available

TO-258

TO-259



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage  <b>15R6CTN&amp;P</b>	VRRM	150	Volts
	VRWM		
	VR		
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	100	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C) note 1	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +200	°C
Maximum Thermal Resistance Junction to Case, each individual diode Junction to Case, both legs tied together	RθJC	1.25	°C/W
		0.75	

Note 1 Per leg

# 15R6CTN&P

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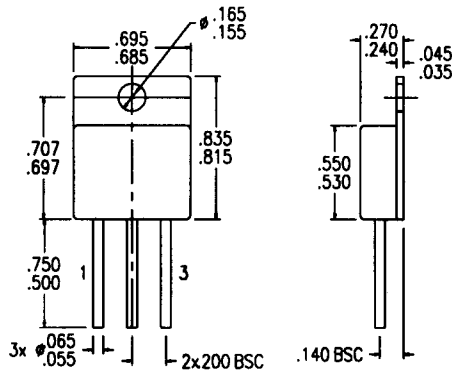
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## ELECTRICAL CHARACTERISTICS (Per leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA=25°C, 300μs Pulse) (IF = 50 Adc, TA=25°C, 300μs Pulse)	<b>VF</b>	0.92 1.05	<b>Vdc</b>
<b>Instantaneous Forward Voltage Drop</b> (IF = 25 Adc, TA= 100°C, 300μs Pulse) (IF = 25 Adc, TA= - 55°C, 300μs Pulse)	<b>VF</b>	0.82 1.04	<b>Vdc</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=25°C, 300μs pulse minimum)	<b>IR</b>	100	<b>μA</b>
<b>Reverse Leakage Current</b> (Rated VR, TA=100°C, 300μs pulse minimum)	<b>IR</b>	2	<b>mA</b>
<b>Junction Capacitance</b> (VR = 10 Vdc, TA=25°C, f= 1 MHz )	<b>CJ</b>	250	<b>pf</b>
<b>Reverse Recovery Time</b> (IF=500mA, IR=1 A, IRR=250mA, TA=25°C)	<b>trr</b>	50	<b>nsec</b>

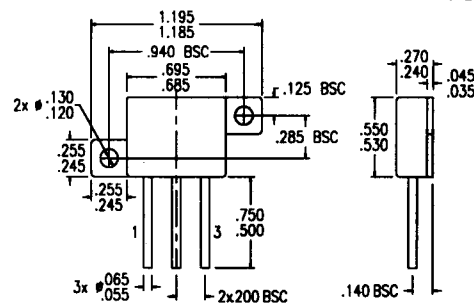
### CASE OUTLINE: TO-258

PIN 1: ANODE 1  
 PIN 2: CATHODE  
 PIN 3: ANODE 2



### CASE OUTLINE: TO-259

PIN 1: ANODE 1  
 PIN 2: CATHODE  
 PIN 3: ANODE 2



## TYPICAL OPERATING CURVES

TA=25°C Unless otherwise specified

