



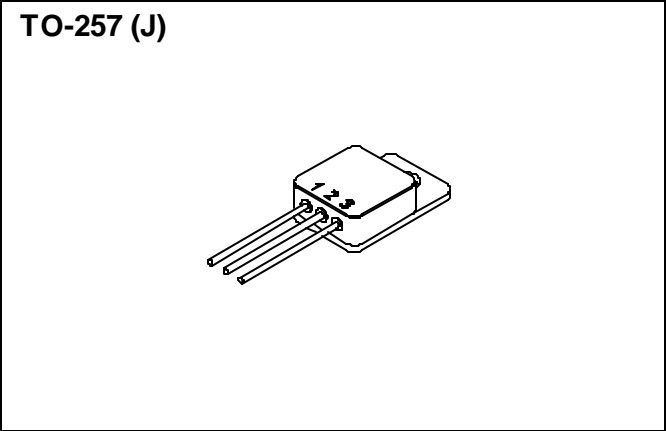
PRELIMINARY

**Solid State Devices, Inc.**

14830 Valley View Blvd \* La Mirada, Ca 90638  
Phone: (562) 404-7855 \* Fax: (562) 404-1773  
ssdi@ssdi-power.com \* www.ssdi-power.com

**SSR1630CTJ  
SSR1630CAJ  
SSR1630DJ**

**16 AMPS  
30 VOLTS  
SCHOTTKY  
RECTIFIER**



**Designer's Data Sheet**

**FEATURES:**

- PIV to 30 Volts
- Low Reverse Leakage Current
- Low Forward Voltage Drop
- Guard Ring for Overvoltage Protection
- Isolated Hermetically Sealed Package
- Custom Lead Forming Available
- Eutectic Die Attach
- Ultrasonic Aluminum Wire Bonds
- 150°C Operating Junction Temperature
- TX, TXV, and Space Level Screening Available. Consult Factory.

**Available in the Following Configurations:**

Rectifier: **SSR1630J, SSR1630JDB, and SSR1630JUB**  
 Common Cathode Centertap: **SSR1630CTJ, SSR1630CTJDB, and SSR1630CTJUB**  
 Common Anode Centertap: **SSR1630CAJ, SSR1630CAJDB, and SSR1630CAJUB**  
 Doubler: **SSR1630DJ, SSR1630DJDB, SSR1630DJUB**

MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive and Peak Reverse Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	30	Volts
Average Rectified Forward Current (Resistive Load, 60 Hz, Sine Wave, $T_A = 25^\circ\text{C}$ ) <sup>1/</sup>	$I_O$	16	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$ ) <sup>1/</sup>	$I_{FSM}$	150	Amps
Operating & Storage Temperature	$T_{OP}$ & $T_{stg}$	-65 to +150	°C
Maximum Thermal Resistance (Junction to Case) <sup>1/</sup>	$R_{\theta JC}$	1.6	°C/W

**NOTE:**  
<sup>1/</sup> Per Leg

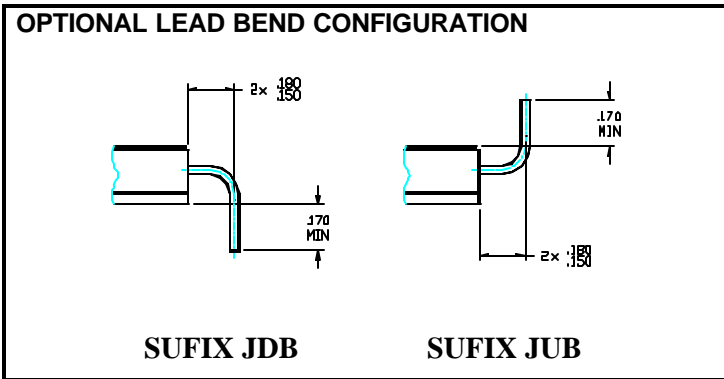
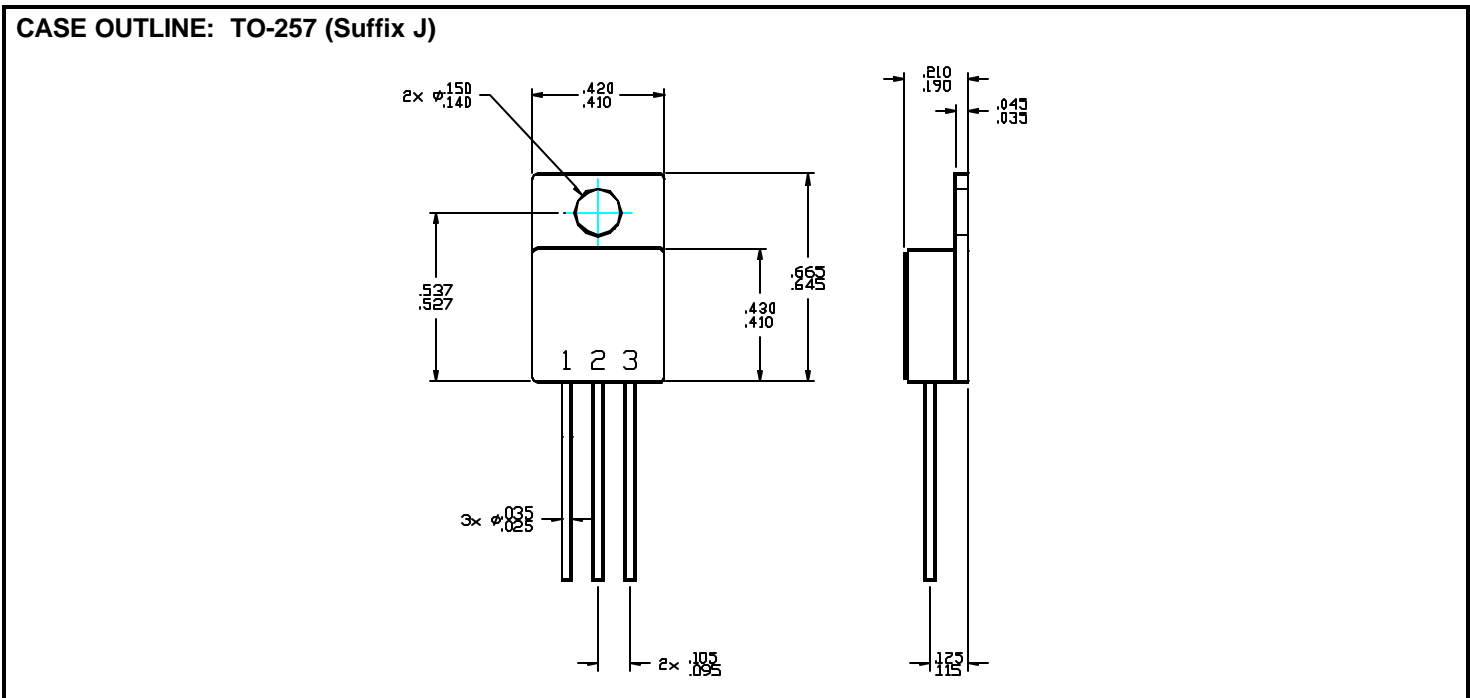


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ELECTRICAL CHARACTERISTICS <sup>1/</sup>		Symbol	Min	Typ	Max	Units
<b>Instantaneous Forward Voltage Drop</b> (T <sub>A</sub> =25°C, 300 μsec pulse)	I <sub>F</sub> = 7.5 A	V <sub>F1</sub>	—		0.48	V <sub>DC</sub>
	I <sub>F</sub> = 16.0 A	V <sub>F2</sub>	—		0.60	
<b>Instantaneous Forward Voltage Drop</b> (I <sub>F</sub> = 16 A, 300 μsec pulse)	T <sub>A</sub> = -55°C	V <sub>F3</sub>	—		0.66	V <sub>DC</sub>
	T <sub>A</sub> = 125 °C	V <sub>F4</sub>	—		0.50	
<b>Reverse Leakage Current</b> (V <sub>R</sub> = 30 V, T <sub>A</sub> = 25°C, 300 μsec pulse minimum)		I <sub>R1</sub>	—		1	mA
<b>Reverse Leakage Current</b> (V <sub>R</sub> = 30 V, T <sub>C</sub> = 100°C, 300 μsec pulse minimum)		I <sub>R2</sub>	—		150	mA
<b>Junction Capacitance</b> (V <sub>R</sub> = 10V, f = 1MHz, T <sub>A</sub> = 25°C)		C <sub>J</sub>	—		1900	pF



PIN ASSIGNMENT				
CODE	FUNCTION	Pin 1	Pin 2	Pin 3
CT	Common Cathode	Anode	Cathode	Anode
CA	Common Anode	Cathode	Anode	Cathode
D	Doubler	Cathode	AC	Anode