



PRELIMINARY

Solid State Devices, Inc.

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Designer's Data Sheet

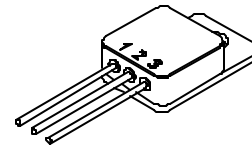
FEATURES:

- 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.

**SSR1630CTJ
SSR1630CAJ
SSR1630DJ**

**16 AMPS
30 VOLTS
SCHOTTKY
RECTIFIER**

TO-257 (J)



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, $T_A = 25^\circ\text{C}$) ^{1/}	I_O	16	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$) ^{1/}	I_{FSM}	150	Amps
Operating & Storage Temperature	T_{OP} & T_{stg}	-65 to +150	°C
Maximum Thermal Resistance (Junction to Case) ^{1/}	$R_{\theta JC}$	1.6	°C/W

NOTE:

^{1/} Per Leg

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

DATA SHEET #: SH0031A

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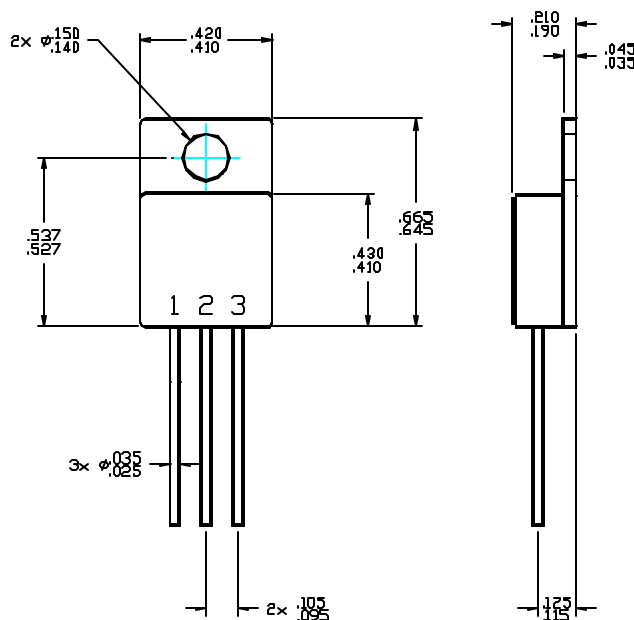
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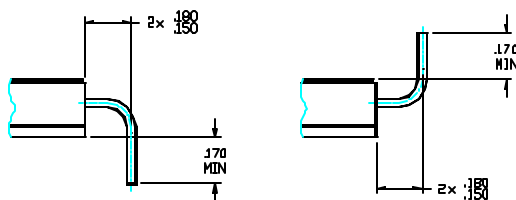
SSR1630CTJ
SSR1630CAJ
SSR1630DJ

ELECTRICAL CHARACTERISTICS ^{1/}		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T _A =25°C, 300 µsec pulse)	I _F = 7.5 A	V _{F1}	—		0.48	V _{DC}
	I _F = 16.0 A	V _{F2}	—		0.60	V _{DC}
Instantaneous Forward Voltage Drop (I _F = 16 A, 300 µsec pulse)	T _A = -55°C	V _{F3}	—		0.66	V _{DC}
	T _A = 125 °C	V _{F4}	—		0.50	V _{DC}
Reverse Leakage Current (V _R = 30 V, T _A = 25°C, 300 µsec pulse minimum)		I _{R1}	—		1	mA
Reverse Leakage Current (V _R = 30 V, T _C = 100°C, 300 µsec pulse minimum)		I _{R2}	—		150	mA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	—		1900	pF

CASE OUTLINE: TO-257 (Suffix J)



OPTIONAL LEAD BEND CONFIGURATION



SUFFIX JDB

SUFFIX JUB

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