Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SSR2045CTJ

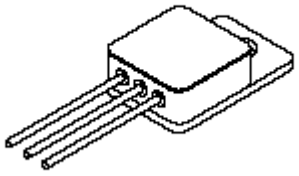
20 AMPS
45 VOLTS
ISOLATED FLAT PACK
POSITIVE CENTER TAP
SCHOTTKY

Designer's Data Sheet

FEATURES:

- **Isolated Low Profile Package**
- **Guard Ring for Overvoltage Protection**
- **-65 °C to 175°C Operating and Storage Temperature**
- **Reverse Voltage to 45 Volts**
- **Low Reverse Leakage**
- **Hermetically Sealed**
- **Very Low Forward Voltage Drop**
- **Available in Common Anode (CAJ) and Doubler (DJ) Configuration**
- **Higher Voltages Available. Consult Factory.**
- **TX, TX-V, and S-Level Screening Available. Consult Factory.**

TO-257(J)



MAXIMUM RATINGS	Symbol	Value	Units
Peak Repetitive Reverse Voltage (Per Leg) and DC Blocking Voltage (Per Leg)	V_{RRM} V_R	45	**Volts**
RMS Reverse Voltage (Per Leg)	V_r	32	**Volts**
Half Wave Rectified Forward Current, Averaged Over Full Cycle (Resistive Load, 60 Hz, Sine Wave, T_C=25°C)	I_O	20	**Amps**
Peak Repetitive Forward Current (T_C=55°C, 8.3 ms Pulse, Allow Junction to Reach Equilibrium Between Pulses)	I_{FRM}	40	**Amps**
Peak Surge Current (T_C=55°C, 8.3 ms Pulse, Superimposed on Rated Current at Rated Voltage)	I_{FSM}	200	**Amps**
Operating and Storage Temperature	T_J & Tstg	-65 to +175	°C

THERMAL CHARACTERISTICS	Symbol	Value	Units
Thermal Resistance, Junction to Case (Both legs tied together)	$R_{\theta JC}$	2.0	°C/W

SSR2045CTJ

Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-7855 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

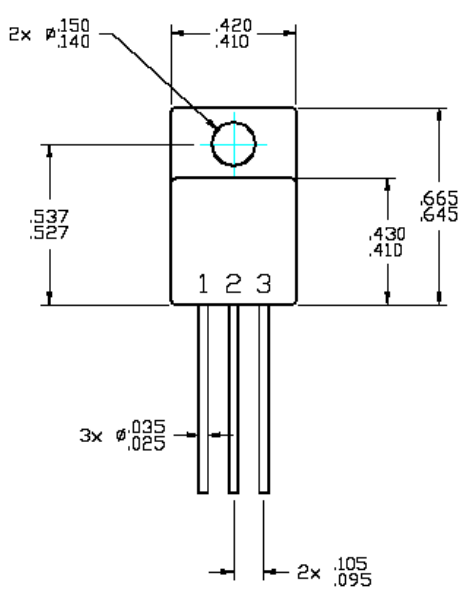
ELECTRICAL CHARACTERISTICS	Symbol	Value	Unit
Max Instantaneous Forward Voltage Drop, per leg * (T_A = 25°C) I_F = 3 Amps I_F = 5 Amps I_F = 10 Amps	V_F	0.50 0.55 0.65	**Volts**
Max Instantaneous Forward Voltage Drop, per leg * (I_F = 5 Amps, T_A = 100°C)	V_F	0.5	**Volts**
Max Reverse Leakage Current per leg * (V_R = 45 V, T_A = 100°C)	I_R	10	**mA**
Max Reverse Leakage Current, per leg * (V_R = 45 V, T_A = 25°C)	I_R	200	**µA**
Max Junction Capacitance, per leg (V_R =10 V_{DC}, T_A = 25°C)	C_J	400	**pF**

NOTES:

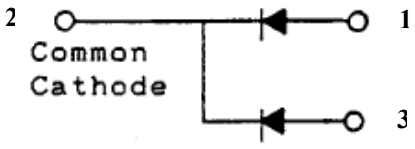
* Pulse Test: Pulse Width = 300µsec, Duty Cycle = 2%

1. Unless Otherwise Specified, All Electrical Characteristics @25ºC

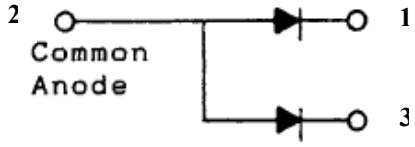
PACKAGE OUTLINE: TO-257 (J)



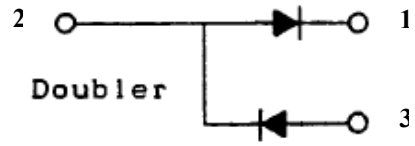
SSR2045CTJ:



SSR2045CAJ:



SSR2045DJ:



*For information on curves, contact the Factory Representative for Engineering Assistance.