Solid State Devices, Inc.
14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
ssdi@ssdi-power.com * www.ssdi-power.com

SSR4045CT/3

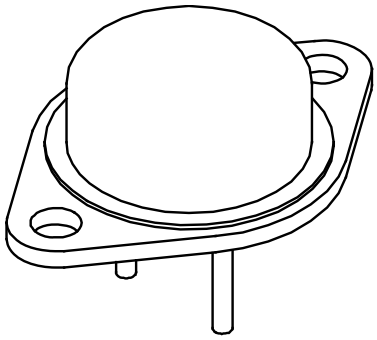
Designer's Data Sheet

FEATURES:

- PIV: 45 Volts
- Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Package
- Guard Ring for Overvoltage Protection
- Gold Eutectic Die Attach
- 175°C Operating Junction Temperature
- Also Available in the following Configurations:
  Common Anode- SSR4045CA/3
  Doubler- SSR4045D/3
- TX, TXV, and Space Level Screening Available

40 AMPS
45 VOLTS
POSITIVE CENTERTAP
SCHOTTKY
RECTIFIER

TO-3



MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	**SSR4045CT/3**	V_{RRM} V_{RWM} V_R	45	**Volts**
Average Rectified Forward Current [1/] (Resistive Load, 60 Hz, Sine Wave, T_A=25°C)		I_O	40	**Amps**
Peak Surge Current [1/] (8.3 ms Pulse, Half Sine Wave Superimposed on I_O, allow junction to reach equilibrium between pulses, T_A=25°C)		I_{FSM}	600	**Amps**
Operating and Storage Temperature		T_{OP} & Tstg	-65 to +175	°C
Maximum Thermal Resistance [1/] Junction to Case		$R_{\theta JC}$	0.9	°C/W

Notes:

1/ Both Legs Tied Together. (Doubler Per Leg: I_O = 20A, I_{FSM} = 300A, $R_{\theta JC}$ = 1.8°C/W)

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ELECTRICAL CHARACTERISTICS (Per Leg)		Symbol	Max	Unit
Instantaneous Forward Voltage Drop (T_A = 25°C, Pulse)	I_F = 5Amps	V_{F1}	0.50	**Volts**
	I_F = 10 Amps	V_{F2}	0.56	
	I_F = 20 Amps	V_{F3}	0.69	
Instantaneous Forward Voltage Drop (I_F = 10 Amps, T_A = -55°C, Pulse)		V_{F4}	0.63	**Volts**
Reverse Leakage Current (Rated V_R, T_A = 25°C, Pulse)		I_{R1}	200	**µA**
Reverse Leakage Current (Rated V_R, T_A = 100°C, Pulse)		I_{R2}	15	**mA**
Junction Capacitance (V_R =10 V_{DC}, T_A = 25°C, f = 1 MHz)		C_J	800	**pF**

CASE OUTLINE:
TO-3

PIN OUT: SSR4045CT/3
(Common Cathode)
CASE: CATHODE
PIN 1: ANODE 1
PIN 2: ANODE 2

PIN OUT: SSR4045CA/3
(Common Anode)
CASE: ANODE
PIN 1: CATHODE 1
PIN 2: CATHODE 2

PIN OUT: SSR4045D/3
(Doubler)
CASE: AC
PIN 1: ANODE
PIN 2: CATHODE