



Solid State Devices, Inc.

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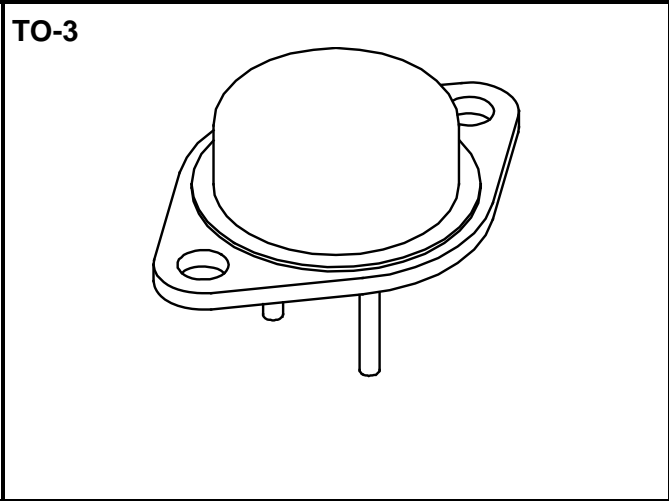
SSR4045CT/3

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**



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, $T_A=25^\circ C$)		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, $T_A=25^\circ C$)		I_{FSM}	600	Amps
Operating and Storage Temperature		T_{OP} & T_{stg}	-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: $I_O = 20A$, $I_{FSM} = 300A$, $R_{\theta JC} = 1.8^\circ C/W$)

NOTE: All specifications are subject to change without notification. SCD's for these devices should be reviewed by SSDI prior to release.	DATA SHEET #: RS0025B	DOC
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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
	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
Reverse Leakage Current (Rated V _R , T _A = 25°C, Pulse)		I _{R1}	200
Reverse Leakage Current (Rated V _R , T _A = 100°C, Pulse)		I _{R2}	15
Junction Capacitance (V _R = 10 V _{DC} , T _A = 25°C, f = 1 MHz)		C _J	800

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

Dimensions shown in drawing:
 Side View: .135 MAX (top flange), 2x .043 / .038 (pins), .450 / .250 (base), 2x .312 MIN (base holes).
 Top View: 2x Ø .165 / .151 (pins), .525 MAX (radius), .675 / .655 (width), 2x R.188 MAX (radius), 1.197 / 1.177 (width), .440 / .420 (height), 2x .225 / .205 (hole offset).