



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

SSR4010CT/3

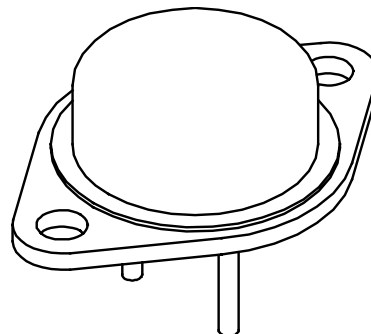
Designer's Data Sheet

FEATURES:

- PIV: 100 Volts
- Very Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Package
- Guard Ring for Overvoltage Protection
- Available in Isolated and Non-isolated versions
- Gold Eutectic Die Attach
- 175°C Operating Junction Temperature
- Also Available in the following Configurations:
 - Common Anode- SSR4010CA/3
 - Doubler- SSR4010D/3
- TX, TXV, and Space Level Screening Available

**40 AMPS
100 VOLTS
POSITIVE CENTERTAP
SCHOTTKY
RECTIFIER**

TO-3



MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR4010CT/3	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Forward Current ^{1/} (Resistive Load, 60 Hz, Sine Wave, $T_A=25^{\circ}\text{C}$)		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, $T_A=25^{\circ}\text{C}$)		I_{FSM}	400	Amps
Operating and Storage Temperature		$T_{OP} \ \& \ T_{stg}$	-65 to +175	$^{\circ}\text{C}$
Maximum Thermal Resistance ^{1/} Junction to Case		$R_{\theta JC}$	0.6	$^{\circ}\text{C/W}$

Notes:

^{1/} Both Legs Tied Together. (Doubler Per Leg: $I_O = 20\text{A}$, $I_{FSM} = 300\text{A}$, $R_{\theta JC} = 1.2^{\circ}\text{C/W}$)

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

DATA SHEET #: RS0097D

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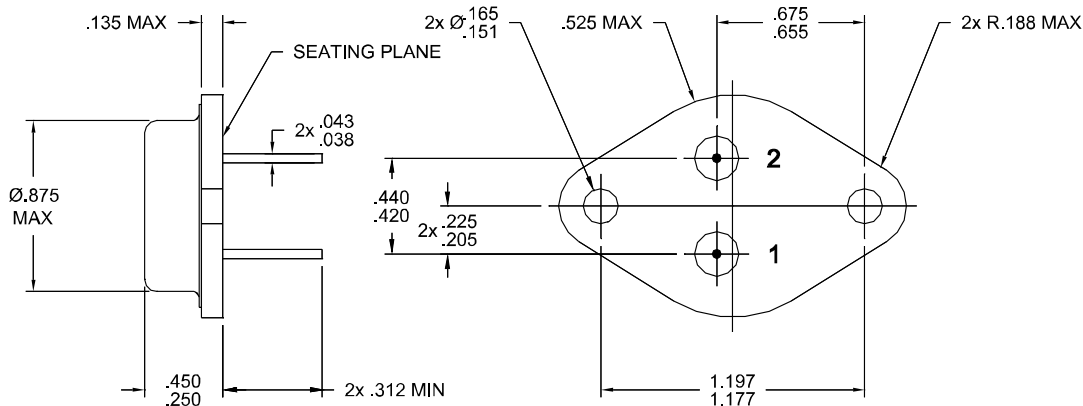
ELECTRICAL CHARACTERISTICS (Per Leg)		Symbol	Max	Unit
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, Pulse)	$I_F = 10\text{Amps}$	V_{F1}	0.75	Volts
	$I_F = 15\text{Amps}$	V_{F2}	0.82	
	$I_F = 20\text{Amps}$	V_{F3}	0.85	
Instantaneous Forward Voltage Drop ($I_F = 10\text{Amps}$, $T_A = -55^\circ\text{C}$, Pulse)		V_{F4}	0.87	Volts
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, Pulse)		I_{R1}	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, Pulse)		I_{R2}	10	mA
Junction Capacitance ($V_R = 10\text{V}_{\text{DC}}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	800	pF

CASE OUTLINE: TO-3

PIN OUT: SSR4010CT/3
(Common Cathode)
CASE: CATHODE
PIN 1: ANODE 1
PIN 2: ANODE 2

PIN OUT: SSR4010CA/3
(Common Anode)
CASE: ANODE
PIN 1: CATHODE 1
PIN 2: CATHODE 2

PIN OUT: SSR4010D/3
(Doubler)
CASE: AC
PIN 1: ANODE
PIN 2: CATHODE



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