



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

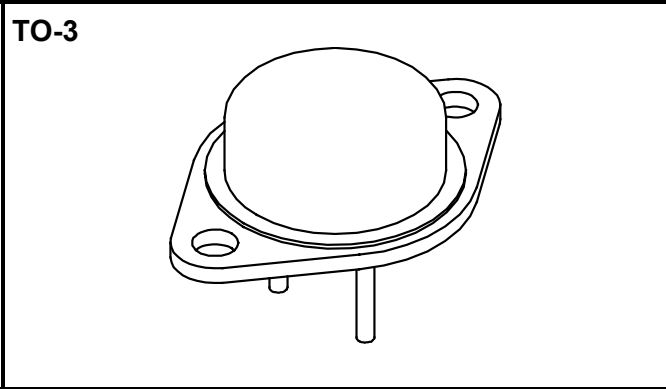
SSR2010CT/3

Designer's Data Sheet

FEATURES:

- PIV: 100 Volts
- Low Forward Voltage Drop
- Low Reverse Leakage
- Hermetically Sealed Package
- Guard Ring for Overvoltage Protection
- Available in Isolated and Non-isolated versions
- Eutectic Die Attach
- 175°C Operating Temperature
- Also Available in the following Configurations:
Common Anode: SSR2010CA/3
Doubler: SSR1010D/3
- TX, TXV, and Space Level Screening Available

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



MAXIMUM RATINGS		Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR2010CT/3	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Forward Current ^{1/} (Resistive Load, 60 Hz, Sine Wave, T _A =25°C)		I_O	20	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}	300	Amps
Operating and Storage Temperature		T _{OP} & T _{stg}	-65 to +175	°C
Maximum Thermal Resistance ^{1/} Junction to Case		R _{θJC}	1.2	°C/W

Notes: ^{1/} Both Legs Tied Together.



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ELECTRICAL CHARACTERISTICS (Per Leg)	Symbol	Max	Unit
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, Pulse)	$I_F = 3\text{ Amps}$ $I_F = 5\text{ Amps}$ $I_F = 10\text{ Amps}$	V_{F1} V_{F2} V_{F3}	0.7 0.72 0.80
Instantaneous Forward Voltage Drop ($I_F = 5\text{ Amps}$, $T_A = -55^\circ\text{C}$, Pulse)		V_{F4}	0.85
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, Pulse)		I_{R1}	100 μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, Pulse)		I_{R2}	5 mA
Junction Capacitance ($V_R = 10\text{ V}_{\text{DC}}$, $T_A = 25^\circ\text{C}$, $f = 1\text{ MHz}$)		C_J	400 pF

CASE OUTLINE:
TO-3

PIN OUT: SSR2010CT/3
(Common Cathode)
CASE: CATHODE
PIN 1: ANODE 1
PIN 2: ANODE 2

PIN OUT: SSR2010CA/3
(Common Anode)
CASE: ANODE
PIN 1: CATHODE 1
PIN 2: CATHODE 2

PIN OUT: SSR1010D/3
(Doubler)
CASE: AC
PIN 1: ANODE
PIN 2: CATHODE

Side view dimensions: $\text{Total height} = .135'' \text{ MAX}$, $\text{Cathode pin diameter} = \text{Ø}.875'' \text{ MAX}$, $\text{Anode pin diameter} = .312'' \text{ MIN}$, $\text{Cathode pin length} = .450''$, $\text{Anode pin length} = .250''$.

Top view dimensions: $\text{Overall width} = 1.197''$, $\text{Overall height} = 1.177''$, $\text{Pin 1 diameter} = \text{Ø}.063''$, $\text{Pin 2 diameter} = \text{Ø}.058''$, $\text{Mounting hole diameter} = 2 \times \text{Ø}.161''$, $\text{Mounting hole offset} = \text{Ø}.151''$, $\text{Top radius} = \text{R}.525'' \text{ MAX}$, $\text{Bottom radius} = \text{R}.188'' \text{ MAX}$, $\text{Pin 1 offset} = .440''$, $\text{Pin 2 offset} = .420''$, $\text{Pin 1 to center} = .675''$, $\text{Pin 2 to center} = .655''$.