



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

SSR2010CTJ, SSR2010CAJ, SSR2010DJ, & SSR2010DRJ Series

20 AMPS, 100 VOLTS CENTERTAP SCHOTTKY RECTIFIER

DESIGNER'S DATA SHEET

Part Number / Ordering Information ^{1/}

SSR2010 | **J** | **Screening** ^{2/} | **Lead Bending:** ^{3/} | **Package:** ^{3/} | **Configuration:**

Screening ^{2/} = Not Screened
 TX = TX Level
 TXV = TXV Level
 S = S Level

 Lead Bending: ^{3/} = Straight
 UB = Up Bend
 DB = Down Bend

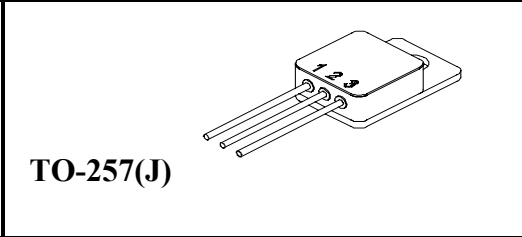
 Package: ^{3/} J = TO-257

 Configuration: CT = Common Cathode
 CA = Common Anode
 D = Doubler
 DR = Doubler Reverse

- FEATURES:**
- PIV 100 Volts
 - Low Forward Voltage Drop
 - Low Reverse Leakage Current
 - Hermetically Sealed Isolated Package
 - Custom Lead Forming Available
 - Ultrasonic Aluminum Wire Bonds
 - Guard Ring for Overvoltage Protection
 - Eutectic Die Attach
 - 175°C Operating Junction Temperature
 - TX, TXV, or Space Level Screening Available

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse Voltage and DC Blocking Voltage SSR2010CTJ, SSR2010CAJ SSR2010DJ, SSR2010DRJ	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Output Current ^{3/} (Resistive Load, 60Hz, Sine Wave, TA=25°C)	I_O	10	Amps
Peak Surge Current ^{3/} (8.3 ms Pulse, Half Sine Wave, superimposed on I_O , allow junction to reach equilibrium between pulses, TA=25°C)	I_{FSM}	200	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance Junction to Case ^{4/} Junction to Case ^{3/}	$R_{\theta JC}$	1.0 2.0	°C/W

Available in the following configurations:
 Rectifier: SSR2010J, SSR2010JDB, and SSR2010JUB (See Data Sheet RS0087)
 Common Cathode Centertap: SSR2010CTJ, SSR2010CTJDB, and SSR2010CTJUB
 Common Anode Centertap: SSR2010CAJ, SSR2010CAJDB, and SSR2010CAJUB
 Doubler: SSR2010DJ, SSR2010DJDB, and SSR2010DJUB
 Doubler Reverse: SSR2010DRJ, SSR2010DRJDB, and SSR2010DRJUB



- NOTES: **1/** For ordering information, Price, and Availability- Contact Factory.
2/ Screened to MIL-PRF-19500.
3/ Per Leg.
4/ Both Legs Tied Together.

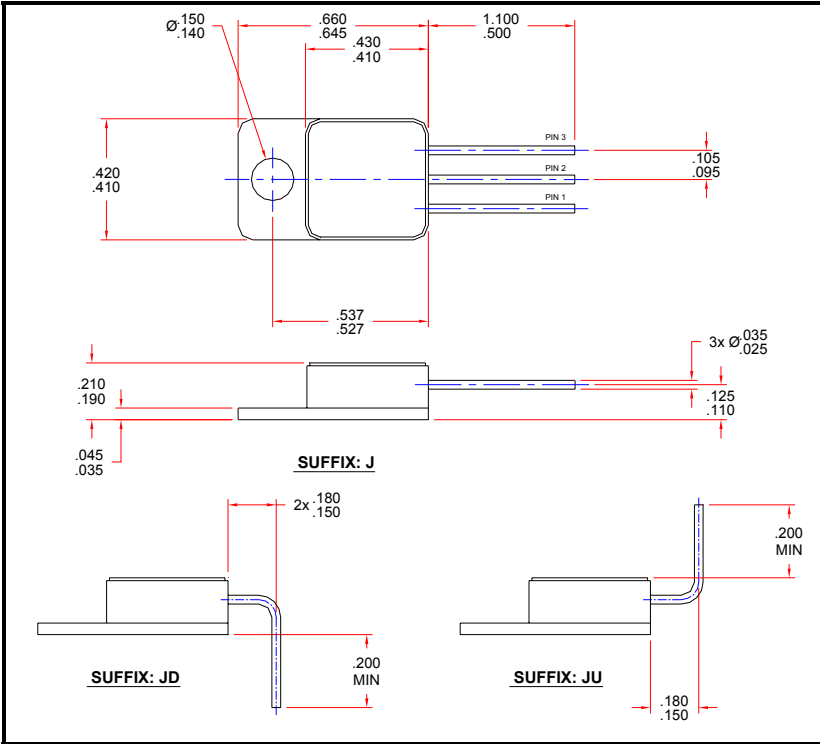


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**SSR2010CTJ, SSR2010CAJ,
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 Series**

Electrical Characteristic ^{5/}	Symbol	Min	Max	Units
Instantaneous Forward Voltage Drop ($I_F = 3 \text{ Adc}$, $T_A = 25^\circ \text{C}$, 300 μs Pulse) ($I_F = 5 \text{ Adc}$, $T_A = 25^\circ \text{C}$, 300 μs Pulse) ($I_F = 10 \text{ Adc}$, $T_A = 25^\circ \text{C}$, 300 μs Pulse)	V_{F1} V_{F2} V_{F3}		0.72 0.76 0.88	Vdc
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ Adc}$, $T_A = -55^\circ \text{C}$, 300 μs Pulse)	V_{F4}		0.85	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ \text{C}$, 300 μs Pulse Minimum)	I_{R1}		100	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ \text{C}$, 300 μs Pulse Minimum)	I_{R2}		5	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ \text{C}$, $f = 1 \text{ MHz}$)	C_J		400	pF



PIN ASSIGNMENT			
CONFIGURATION	Pin 1	Pin 2	Pin 3
Common Cathode (CT)	Anode	Cathode	Anode
Common Anode (CA)	Cathode	Anode	Cathode
Doubler (D)	Cathode	AC	Anode
Doubler Reverse (DR)	Anode	AC	Cathode