



**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

**SSR0508J  
 SSR0509J  
 SSR0510J**

**5 AMP  
 80 – 100 VOLTS  
 SCHOTTKY RECTIFIER**

**Designer's Data Sheet**

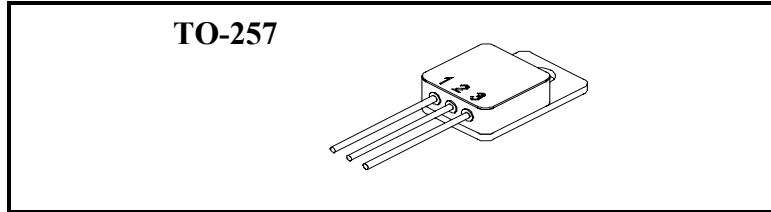
**Part Number/Ordering Information<sup>1/</sup>**

SSR0508J           
 SSR0509J           
 SSR0510J         

    L    **Screening<sup>2/</sup>**       = Not Screened  
    TX    = TX Level  
    TXV = TXV  
    S    = S Level

**Lead Options**       = Straight Leads,  
                                  DB = Bent Down, UB = Bent Up

- FEATURES:**
- Extremely Low Forward Voltage Drop
  - Low Reverse Leakage
  - Hermetically Sealed Isolated Power Package
  - Guard Ring for Over-Voltage Protection
  - Eutectic Die Attach
  - 175°C Operating Junction Temperature
  - TX, TXV, or Space Level Screening Available



**MAXIMUM RATINGS**

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage	$V_{RRM}$		
SSR0508J		80	Volts
SSR0509J	$V_{RWM}$	90	
SSR0510J	$V_R$	100	
Average Rectified Output Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	$I_O$	5	Amps
Peak Surge Current <sup>3/</sup> (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 <sup>3/</sup> Junction to Case	$R_{\theta JC}$	1.7	°C/W

- NOTES:
- 1/** For ordering information, Price, and Availability- Contact Factory.
- 2/** Screened to MIL-PRF-19500.
- 3/** For optimal performance, leads 2 & 3 should be connected.

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

**DATA SHEET #: RS0191C**

**DOC**



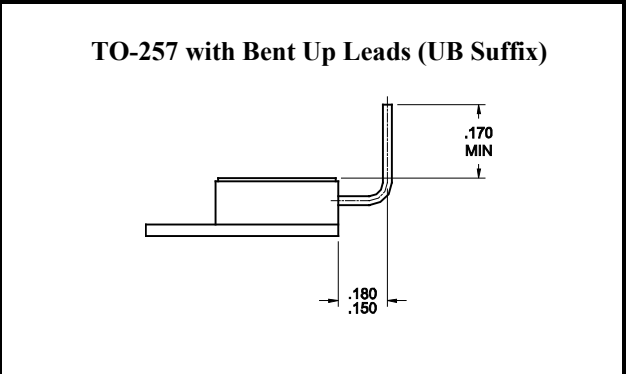
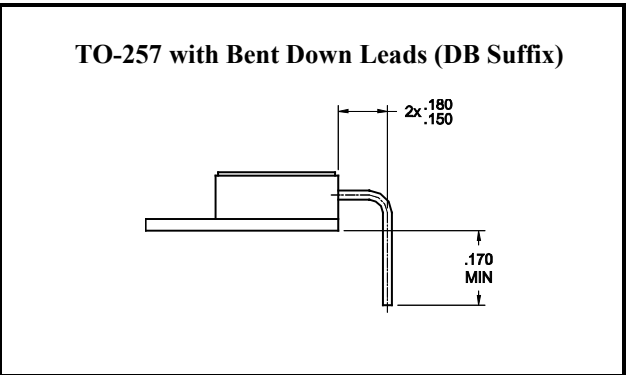
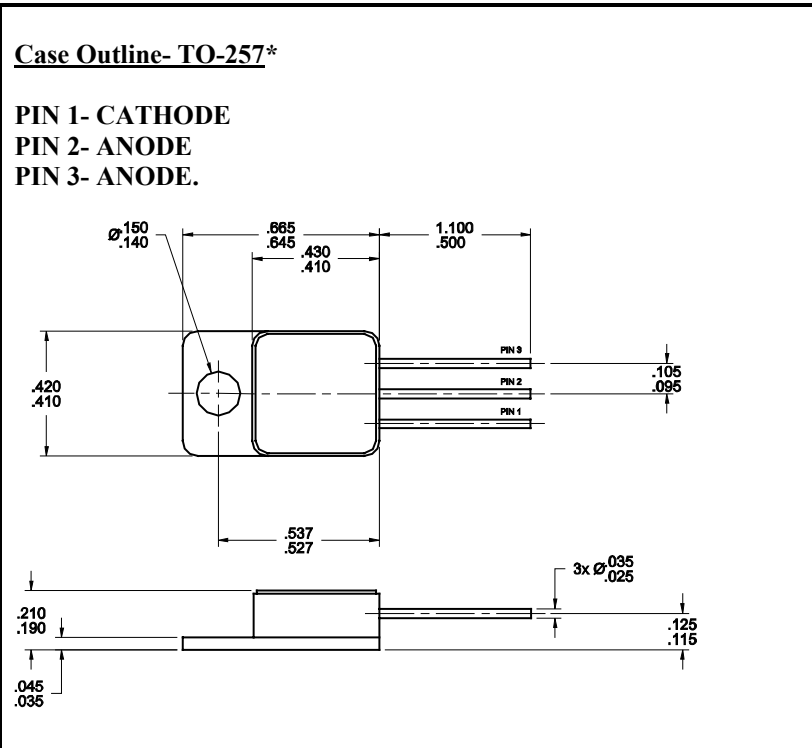
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**ELECTRICAL CHARACTERISTICS**

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 1 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , Pulse) ( $I_F = 5 \text{ Adc}$ , $T_A = 25^\circ\text{C}$ , Pulse)	$V_{F1}$ $V_{F2}$	0.56 0.73	Vdc
<b>Instantaneous Forward Voltage Drop</b> ( $I_F = 5 \text{ Adc}$ , $T_A = -55^\circ\text{C}$ , Pulse)	$V_{F3}$	0.8	Vdc
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 25^\circ\text{C}$ , Pulse)	$I_{R1}$	100	$\mu\text{A}$
<b>Reverse Leakage Current</b> (Rated $V_R$ , $T_A = 100^\circ\text{C}$ , Pulse)	$I_{R2}$	5	mA
<b>Junction Capacitance</b> ( $V_R = 10 \text{ Vdc}$ , $T_A = 25^\circ\text{C}$ , $f = 1 \text{ MHz}$ )	$C_J$	400	pF



\* For information on curves, contact the Factory Representative for Engineering Assistance.