



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
Phone: (562) 404-4474 * Fax: (562) 404-1773
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Designer's Data Sheet

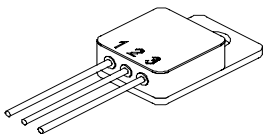
Part Number/Ordering Information^{1/}

SSR0508J — —
SSR0509J — —
SSR0510J — —

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

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

TO-257



SSR0508J
SSR0509J
SSR0510J

5 AMP
80 — 100 VOLTS
SCHOTTKY RECTIFIER

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	
SSR0509J	V_{RWM}	90	Volts
SSR0510J	V_R	100	
Average Rectified Output Current (Resistive Load, 60Hz, Sine Wave, $T_A=25^\circ\text{C}$)	I_O	5	Amps
Peak Surge Current ^{3/} (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}	200	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance ^{3/} Junction to Case	$R_{\theta JC}$	1.7	$^\circ\text{C/W}$

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

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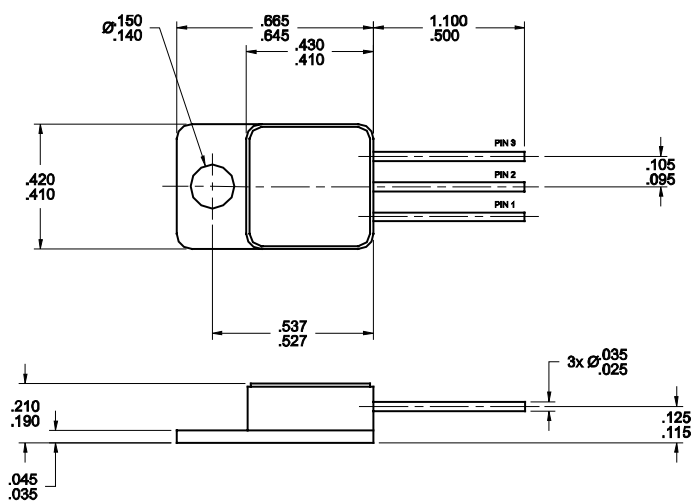
SSR0508J
SSR0509J
SSR0510J

ELECTRICAL CHARACTERISTICS

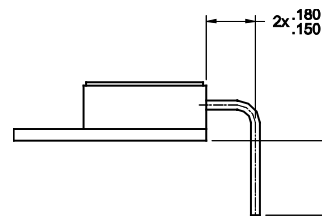
CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ Adc}$, $T_A = 25^\circ\text{C}$, Pulse) ($I_F = 5 \text{ Adc}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F1} V_{F2}	0.56 0.73	Vdc
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ Adc}$, $T_A = -55^\circ\text{C}$, Pulse)	V_{F3}	0.8	Vdc
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 ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	C_J	400	pF

Case Outline- TO-257*

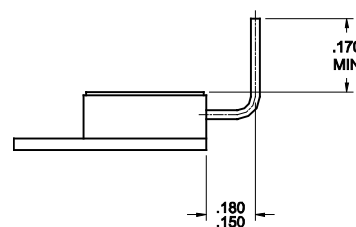
PIN 1- CATHODE
PIN 2- ANODE
PIN 3- ANODE.



TO-257 with Bent Down Leads (DB Suffix)



TO-257 with Bent Up Leads (UB Suffix)



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

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