



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

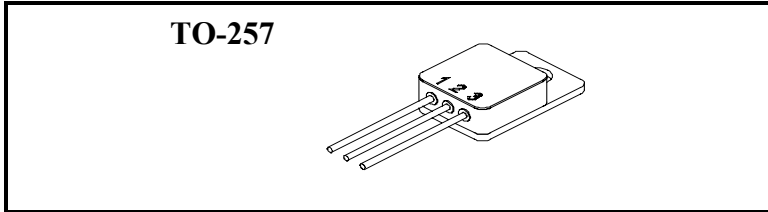
Part Number/Ordering Information^{1/}

SSR0508J
 SSR0509J
 SSR0510J

 L **Screening^{2/}** = 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 ^{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 ^{3/} 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.



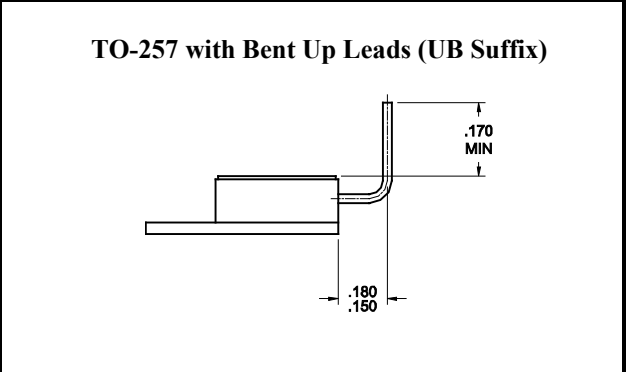
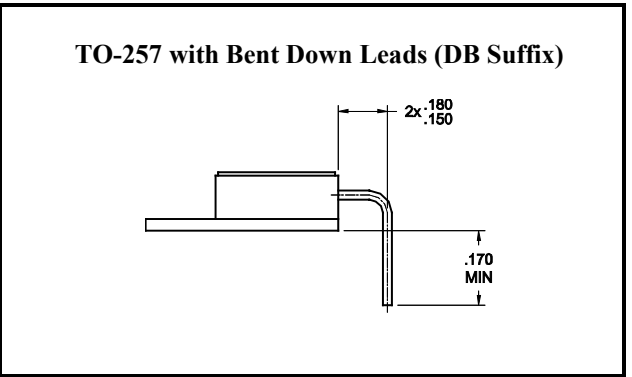
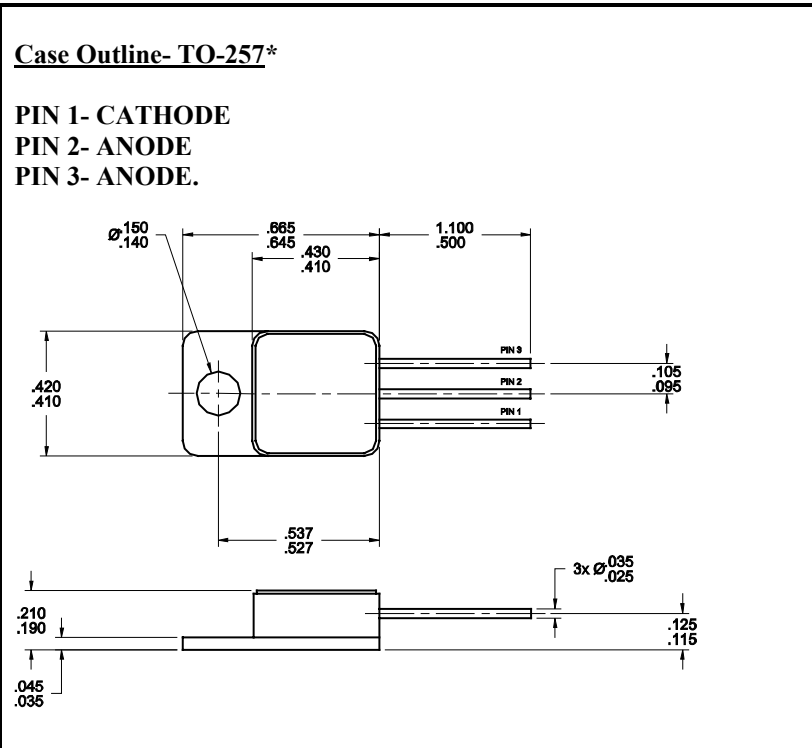
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 1 \text{ Adc}, T_A = 25^\circ\text{C}, \text{Pulse}$) ($I_F = 5 \text{ Adc}, T_A = 25^\circ\text{C}, \text{Pulse}$)	V_{F1} V_{F2}	0.56 0.73	Vdc
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ Adc}, T_A = -55^\circ\text{C}, \text{Pulse}$)	V_{F3}	0.8	Vdc
Reverse Leakage Current (Rated $V_R, T_A = 25^\circ\text{C}, \text{Pulse}$)	I_{R1}	100	μA
Reverse Leakage Current (Rated $V_R, T_A = 100^\circ\text{C}, \text{Pulse}$)	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



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