



Solid State Devices, Inc.

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**SSR1008M, SSR1008Z
SSR1009M, SSR1009Z
SSR1010M, SSR1010Z**

**10 AMPS
80 - 100 VOLTS
SCHOTTKY RECTIFIER**

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

Designer's Data Sheet

Part Number/Ordering Information ^{1/}

SSR1008 — — —
 SSR1009 — — —
 SSR1010 — — —

L Screening ^{2/}

- = Not Screened
- TX = TX Level
- TXV = TXV Level
- S = S Level

Lead Options

- = Straight Leads
- DB = Bent Down
- UB = Bent Up

Package

- M = TO-254
- Z = TO-254Z

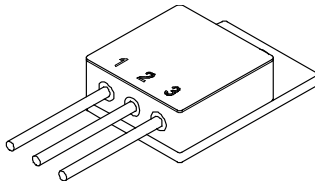
MAXIMUM RATINGS

RATING		SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR1008	V_{RRM}	80	Volts
	SSR1009	V_{RWM}	90	
	SSR1010	V_R	100	
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 ^{3/} Junction to Case		$R_{\theta JC}$	2.0	°C/W

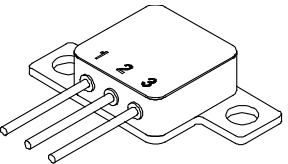
NOTES:

- ^{1/} For ordering information, price, and availability- Contact Factory.
- ^{2/} Screening based on MIL-PRF-19500. Screening flows available on request.
- ^{3/} For optimal performance, connect leads 2 & 3 together.

TO-254



TO-254Z



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

DATA SHEET #: RS0205L

DOC



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ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAX	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) ($I_F = 10 \text{ Adc}$, $T_A = 25^\circ\text{C}$, Pulse)	V_{F1} V_{F2} V_{F3}	0.57 0.72 0.8	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ Adc}$, Pulse)	V_{F4} V_{F5}	0.70 0.90	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

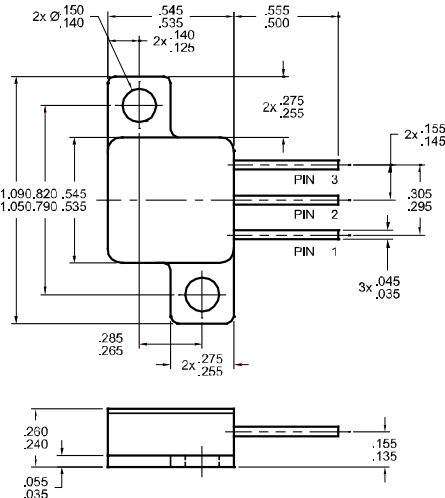
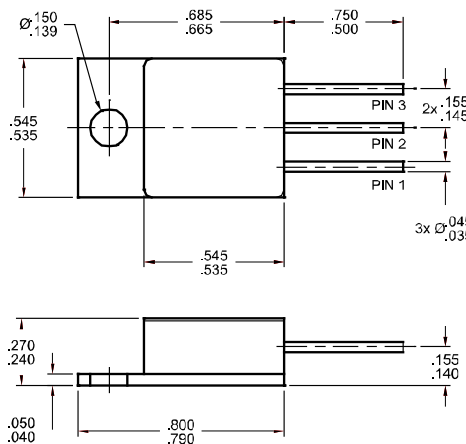
Case Outlines- TO-254 and TO-254Z Configuration ^{4/}

PIN OUT: Rectifier

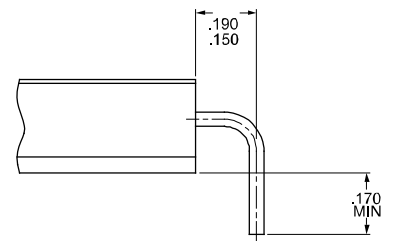
PIN 1- CATHODE
 PIN 2- ANODE
 PIN 3- ANODE

TO-254 (M Suffix)

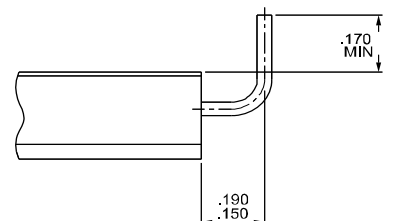
TO-254Z (Z Suffix)



Optional Bent Down Leads (MDB & ZDB Suffix)



Optional Bent Up Leads (MUB & ZUB Suffix)



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

NOTES: ^{4/} Pins 2 and 3 must be externally connected for best performance.

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