


Solid State Devices, Inc.

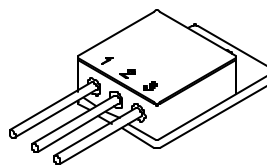
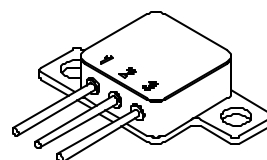
14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

Designer's Data Sheet
FEATURES:

- PIV: 100 Volts
- Low Reverse Leakage Current
- Low Forward Voltage Drop
- Guard Ring for Overvoltage Protection
- Isolated Hermetically Sealed Package
- Available in Glass or Ceramic Seal Packages
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Junction Temperature
- TX, TXV, and Space Level Screening Available

SSR2008M, SSR2008Z
SSR2009M, SSR2009Z
SSR2010M, SSR2010Z

20 AMPS
100 VOLTS
SCHOTTKY
RECTIFIER

TO-254

TO-254Z

Available in the Following Configurations:

TO-254: **SSR2008M, SSR2008MUB, SSR2008MDB, SSR2009M, SSR2009MUB, SSR2009MDB, SSR2010M, SSR2010MUB, SSR2010MDB.**

TO-254Z: **SSR2008Z, SSR2008ZUB, SSR2008ZDB, SSR2009Z, SSR2009ZUB, SSR2009ZDB, SSR2010Z, SSR2010ZUB, SSR2010ZDB**

MAXIMUM RATINGS ^{2/}		Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR2008M & Z	V_{RRM}	80	Volts
	SSR2009M & Z	V_{RWM}	90	
	SSR2010M & Z	V_R	100	
Average Rectified Forward Current ^{1/ 3/} (Resistive Load, 60 Hz, Sine Wave, $T_C = 25^\circ\text{C}$)		I_O	20	Amps
Peak Surge Current ^{3/} (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$)		I_{FSM}	300	Amps
Operating and Storage Temperature		$T_{OP} \text{ \& } T_{stg}$	-65 to +175	°C
Maximum Thermal Resistance ^{3/} (Junction to Case)		R_{qJC}	1.0	°C/W

NOTE:

1/ Derate Linearly at 1A/°C for $T_C > 155^\circ\text{C}$.

2/ All Electrical Characteristics @25°C, Unless Otherwise Specified.

3/ pins 2 and 3 externally connected together

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

DATA SHEET #: RS0091H

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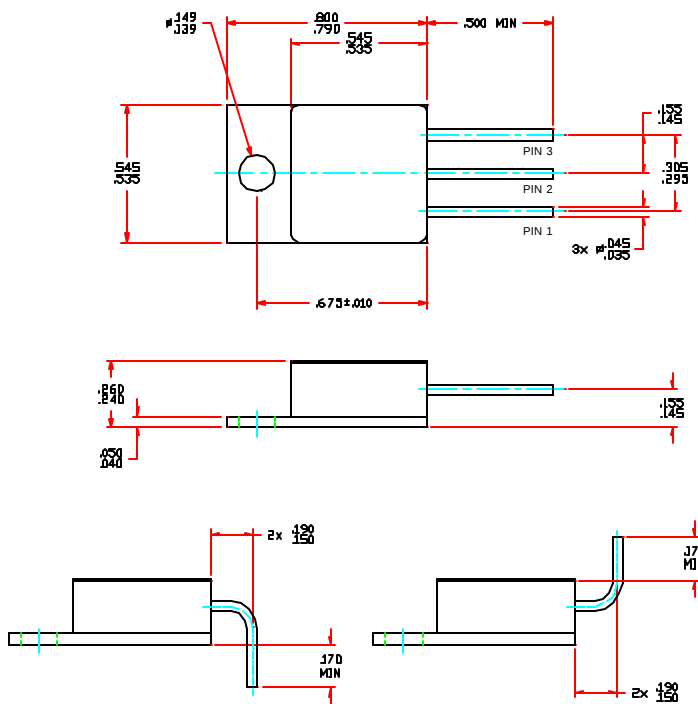
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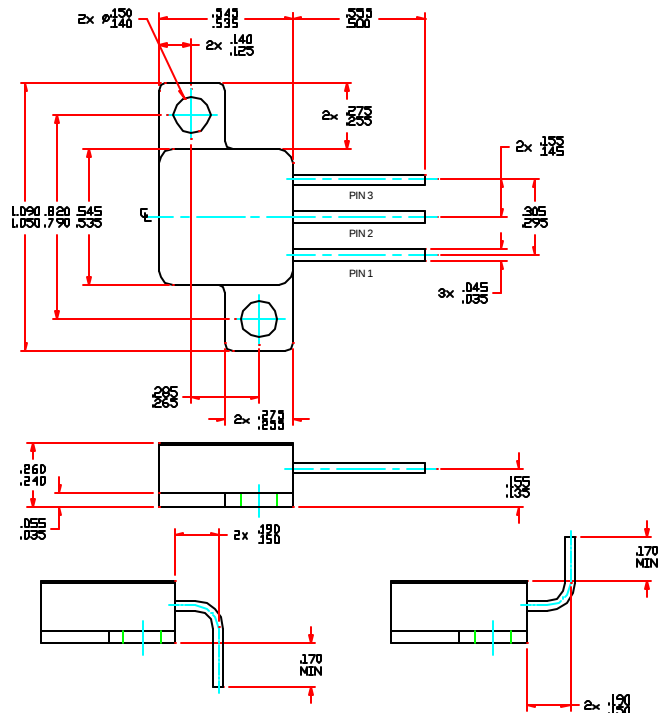
SSR2008M, SSR2008Z
SSR2009M, SSR2009Z
SSR2010M, SSR2010Z

ELECTRICAL CHARACTERISTICS ^{2/} (per leg)		Symbol	Max	Unit
Instantaneous Forward Voltage Drop (300 - 500µs Pulse)	I _F = 10 A	V _{F1}	0.75	Volts
	I _F = 15 A	V _{F2}	0.82	
	I _F = 20 A	V _{F3}	0.85	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 - 500µs Pulse)	I _F = 10 A	V _{F4}	0.85	Volts
Reverse Leakage Current (Rated V _R , 300µs pulse minimum)	T _A = 25°C	I _{R1}	200	mA
	T _C = 100°C	I _{R2}	10	mA
Junction Capacitance (V _R = 10 V, f = 1MHz, T _A = 25°C)		C _J	800	pF

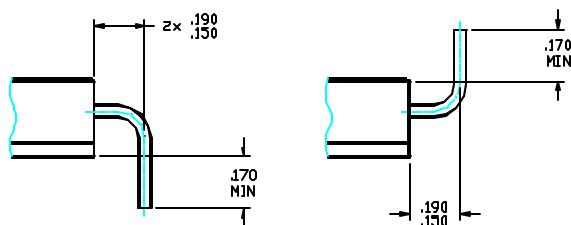
CASE OUTLINE: TO-254 (Suffix M)



CASE OUTLINE: TO-254Z (Suffix Z)



OPTIONAL LEAD BEND CONFIGURATION



SUFFIX MD & ZD

SUFFIX MU & ZU

PIN ASSIGNMENT

FUNCTION	PIN 1	PIN 2	PIN 3
Rectifier ^{4/}	Cathode	Anode	Anode

NOTE:

^{4/} Pins 2 and 3 externally connected for best performance.

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