



Solid State Devices, Inc.

14830 Valley View Blvd * La Mirada, Ca 90638

Phone: (562) 404-7855 * Fax: (562) 404-1773

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SSR2010M SSR2010Z

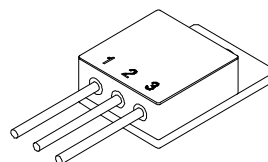
**20 AMPS
100 VOLTS
SCHOTTKY
RECTIFIER**

Designer's Data Sheet

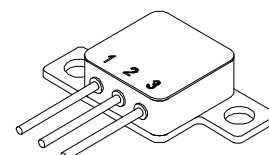
FEATURES:

- 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. Consult Factory.

TO-254



TO-254Z



Available in the Following Configurations:

TO-254: **SSR2010M, SSR2010MUB, SSR2010MDB**

TO-254Z: **SSR2010Z, SSR2010ZUB, SSR2010ZDB**

MAXIMUM RATINGS ^{2/}	Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	Volts
Average Rectified Forward Current ^{1/} (Resistive Load, 60 Hz, Sine Wave, $T_C = 55^\circ\text{C}$)	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} & T_{stg}	-65 to +175	$^\circ\text{C}$
Maximum Thermal Resistance (Junction to Case)	R_{qJC}	1.0	$^\circ\text{C/W}$

NOTE:

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

^{2/} All Electrical Characteristics @25 $^\circ\text{C}$, Unless Otherwise Specified.

^{3/} pins 2 and 3 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 #: RS0091G

DOC

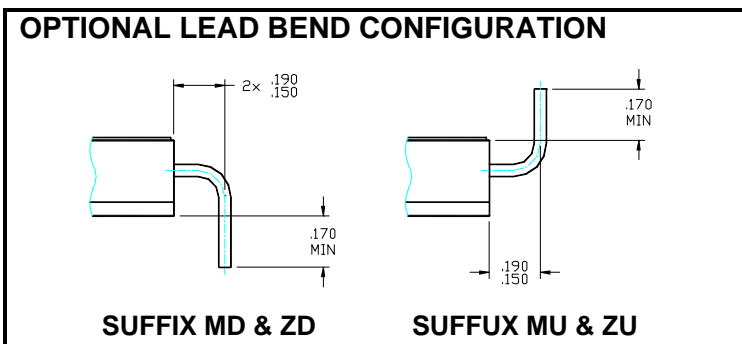
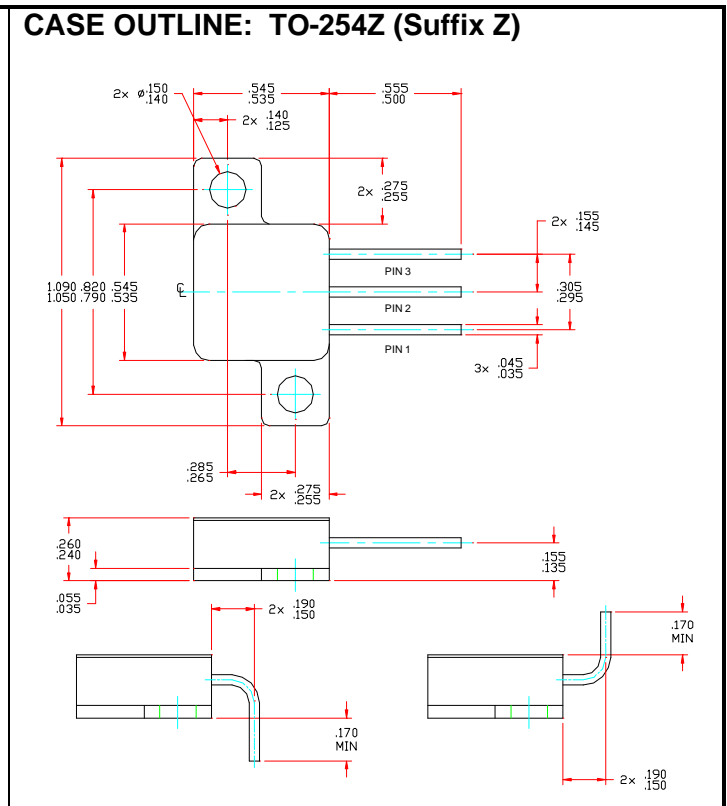
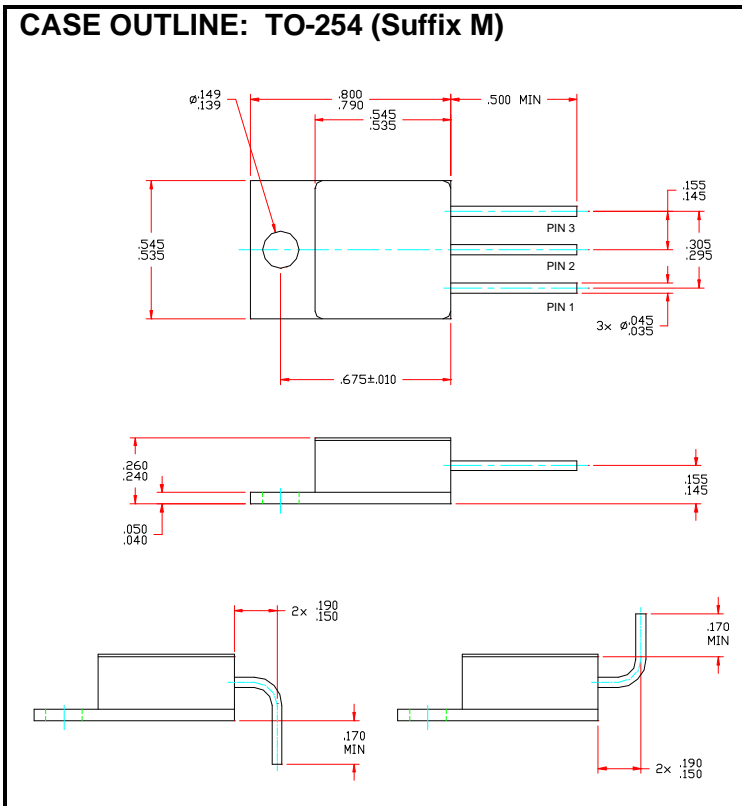


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SSR2010M SSR2010Z

ELECTRICAL CHARACTERISTICS ^{2/} (per leg)		Symbol	Max	Unit
Instantaneous Forward Voltage Drop (300 - 500µs Pulse)	$I_F = 10\text{ A}$	V_{F1}	0.80	Volts
	$I_F = 15\text{ A}$	V_{F2}	0.87	
	$I_F = 20\text{ A}$	V_{F3}	0.90	
Instantaneous Forward Voltage Drop ($T_A = -55^\circ\text{C}$, 300 - 500µs Pulse)	$I_F = 10\text{ A}$	V_{F4}	0.85	Volts
Reverse Leakage Current (Rated V_R , 300µs pulse minimum)	$T_A = 25^\circ\text{C}$	I_{R1}	200	mA
	$T_C = 100^\circ\text{C}$	I_{R2}	15	mA
Junction Capacitance ($V_R = 10\text{ V}$, $f = 1\text{ MHz}$, $T_A = 25^\circ\text{C}$)		C_J	800	pf



PIN ASSIGNMENT				
CODE	FUNCTION	PIN 1	PIN 2	PIN 3
-- 4/	Rectifier	Cathode	Anode	Anode

4/ pins 2 and 3 externally connected for best performance

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