



# Solid State Devices, Inc.

14701 Firestone Blvd \* La Mirada, Ca 90638  
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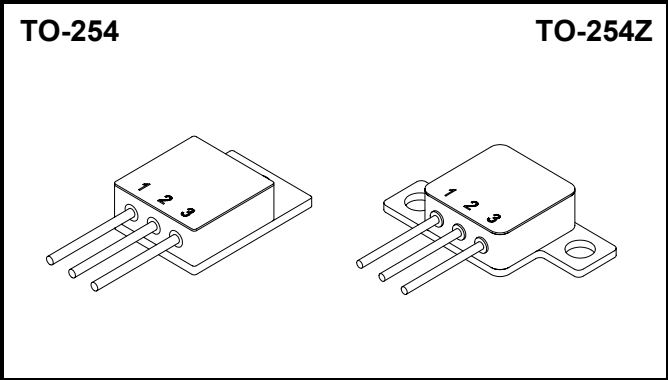
**SSR2008CTM, SSR2008CTZ  
SSR2009CTM, SSR2009CTZ  
SSR2010CTM, SSR2010CTZ**

## 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

**20 AMPS  
100 VOLTS  
CENTER TAP  
SCHOTTKY RECTIFIER**



Available in Given Voltage (2008, 2009, 2010) in the Following Configurations:  
TO-254: **SSR2010CTM, SSR2010CTMUB, SSR2010CTMDB, SSR2010CAM, SSR2010CAMUB, SSR2010CAMDB  
SSR1010DM, SSR1010DMUB, SSR1010DMDB**  
TO-254Z: **SSR2010CTZ, SSR2010CTZUB, SSR2010CTZDB, SSR2010CAZ, SSR2010CAZUB, SSR2010CAZDB  
SSR1010DZ, SSR1010DZUB, SSR1010DZDB**

MAXIMUM RATINGS <sup>1/</sup>		Symbol	Value	Unit
Peak Repetitive Reverse Voltage and DC Blocking Voltage	SSR2008CTM & CTZ	$V_{RRM}$	80	Volts
	SSR2090CTM & CTZ	$V_{RWM}$	90	
	SSR2010CTM & CTZ	$V_R$	100	
Average Rectified Forward Current <sup>3/ 4/</sup> (Resistive Load, 60 Hz, Sine Wave, $T_C = 25^\circ C$ )		$I_O$	20	Amps
Peak Surge Current <sup>3/ 4/</sup> (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ C$ )		$I_{FSM}$	300	Amps
Operating and Storage Temperature		$T_{OP} \& T_{stg}$	-65 to +175	°C
Maximum Thermal Resistance	Junction to Case <sup>3/</sup>	$R_{\theta JC}$	1.0	°C/W
	Junction to Case <sup>2/</sup>		1.7	

### NOTE:

- 1/** All Electrical Characteristics @25°C, Unless Otherwise Specified.
- 2/** Per Leg.
- 3/** Pins 1 and 3 Connected Together.
- 4/** Doubler:  $I_O = 10A$ ,  $I_{FSM} = 200A$ .

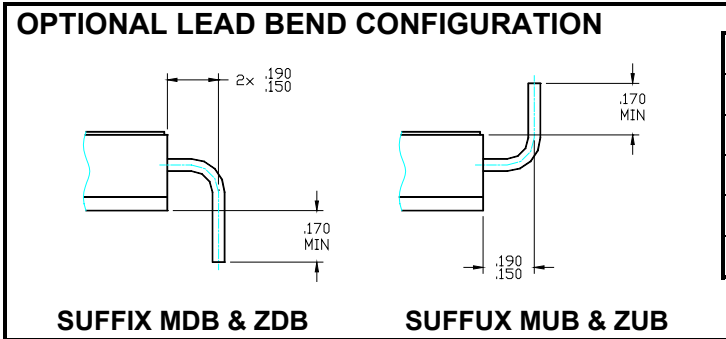
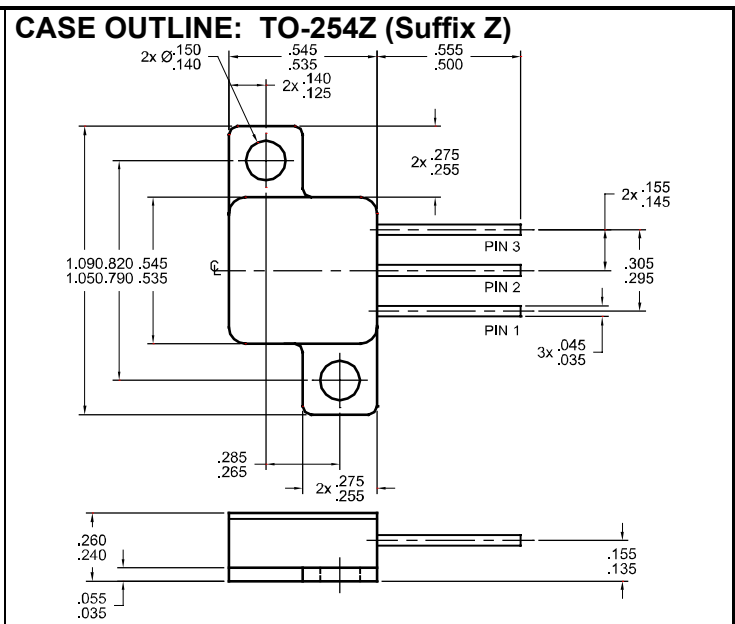
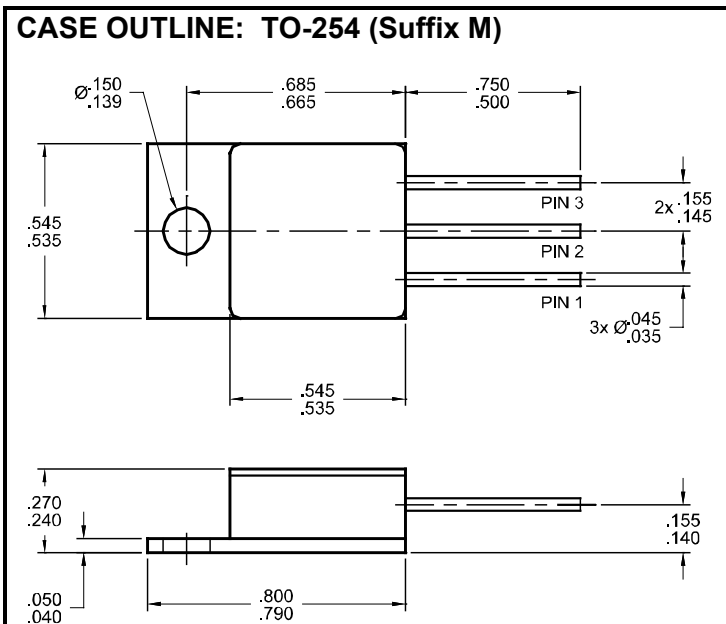


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 SSR2010CTM, SSR2010CTZ**

ELECTRICAL CHARACTERISTICS <sup>1/, 2/</sup>		Symbol	Max	Unit
Instantaneous Forward Voltage Drop (300 - 500µs Pulse)	$I_F = 1A$	$V_{F1}$	0.57	Volts
	$I_F = 5A$	$V_{F2}$	0.72	
	$I_F = 10A$	$V_{F3}$	0.80	
Instantaneous Forward Voltage Drop (300 - 500µs Pulse)	$I_F = 10A, T_A = 100^\circ C$	$V_{F4}$	0.70	Volts
	$I_F = 10A, T_A = -55^\circ C,$	$V_{F5}$	0.90	
Reverse Leakage Current (300µs pulse minimum)	$V_R = 100V, T_A = 25^\circ C$	$I_{R1}$	100	µA
	$V_R = 100V, T_C = 100^\circ C$	$I_{R2}$	5	mA
Junction Capacitance ( $V_R = 10V, f = 1MHz, T_A = 25^\circ C$ )		$C_J$	400	pF



PIN ASSIGNMENT				
CODE	FUNCTION	PIN 1	PIN 2	PIN 3
CT	Common Cathode	Anode	Cathode	Anode
CA	Common Anode	Cathode	Anode	Cathode
D	Doubler	Cathode	Common	Anode
DR	Reverse Doubler	Anode	Common	Cathode

**NOTE:**

- 1/ All Electrical Characteristics @25°C, Unless Otherwise Specified.
- 2/ Per Leg.