



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
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Designer's Data Sheet

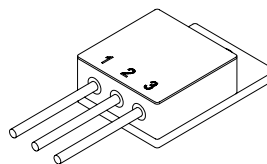
FEATURES:

- 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

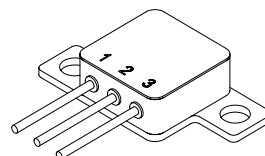
SSR2008CTM, SSR2008CTZ
SSR2009CTM, SSR2009CTZ
SSR2010CTM, SSR2010CTZ

20 AMPS
100 VOLTS
CENTER TAP
SCHOTTKY RECTIFIER

TO-254



TO-254Z



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 ^{1/}		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 ^{3/ 4/} (Resistive Load, 60 Hz, Sine Wave, $T_C = 25^\circ\text{C}$)		I_O	20	Amps
Peak Surge Current ^{3/ 4/} (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 ^{3/}	$R_{\theta JC}$	1.0	$^\circ\text{C/W}$
	Junction to Case ^{2/}		1.7	

NOTE:

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

2/ Per Leg.

3/ Pins 1 and 3 Connected Together.

4/ Doubler: $I_O = 10\text{A}$, $I_{FSM} = 200\text{A}$.

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

DATA SHEET #: RS0075F

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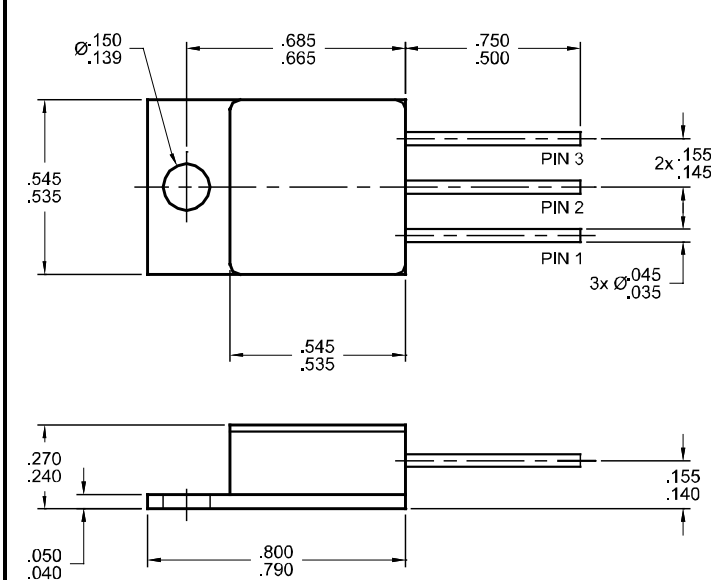
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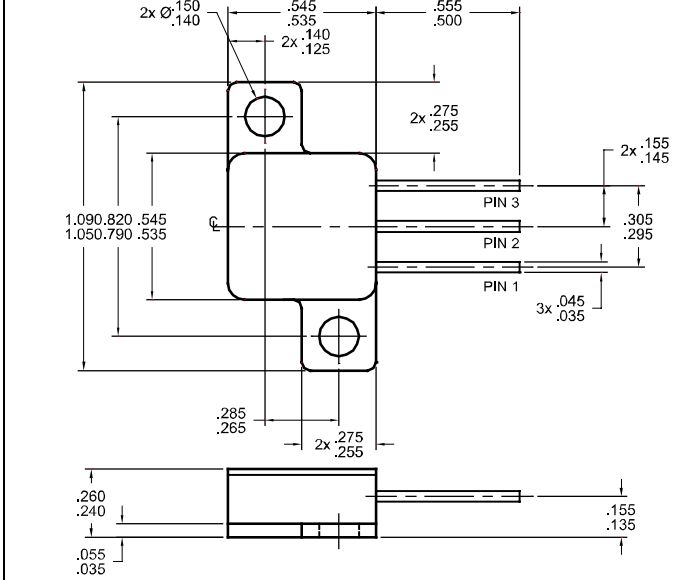
SSR2008CTM, SSR2008CTZ
SSR2009CTM, SSR2009CTZ
SSR2010CTM, SSR2010CTZ

ELECTRICAL CHARACTERISTICS ^{1/, 2/}		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 ($V_R = 10 V, f = 1MHz, T_A = 25^\circ C$)		C_J	400	pF

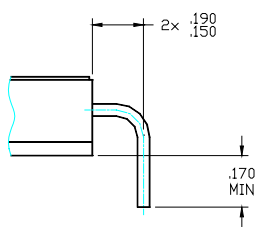
CASE OUTLINE: TO-254 (Suffix M)



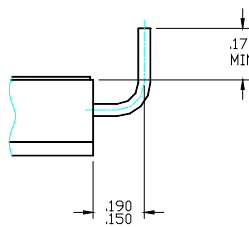
CASE OUTLINE: TO-254Z (Suffix Z)



OPTIONAL LEAD BEND CONFIGURATION



SUFFIX MDB & ZDB



SUFFIX MUB & ZUB

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:

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2/ Per Leg.

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