



Solid State Devices, Inc.

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

Part Number/Ordering Information ^{1/}

SSR80 _ _ _ _

Screening ^{2/}
_ = Not Screened
TX = TX Level
TXV = TXV Level
S = S Level

Lead Options
_ = Straight Leads
DB = Down Bent
UB = Up Bent

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

Configuration CT = Common Cathode
CA = Common Anode
D = Doubler
DR = Doubler Reverse

Family/Voltage 150 = 150V
200 = 200V

**SSR80150CTM&Z
thru
SSR80200CTM&Z**

**80 AMP, 150 - 200 VOLTS
SCHOTTKY
CENTERTAP RECTIFIER**

FEATURES:

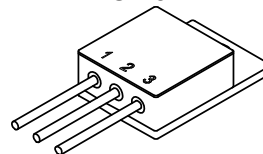
- High Surge Rating
- Low Reverse Leakage Current
- Low Junction Capacitance
- Isolated Hermetically Sealed Package
- Ultrasonic Aluminum Wire Bonds
- Ceramic Seal for Improved Reliability Available
- TX, TXV, or Space Level Screening Available ^{2/}

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage SDR80150_ SDR80200_	V_{RRM} V_{RWM} V_R	150 200	Volts
Average Rectified Forward Current ^{3/} (Resistive Load, 60 Hz Sine Wave, $T_C = 100^\circ\text{C}$)	I_O	80	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, $T_A = 25^\circ\text{C}$, per leg)	I_{FSM}	250	Amps
Operating & Storage Temperature	$T_{OP} \& T_{STG}$	-65 to +200	$^\circ\text{C}$
Maximum Total Thermal Resistance Junction to Case, each individual diode Junction to Case ^{3/}	$R_{\theta JC}$	2.0 1.4	$^\circ\text{C/W}$

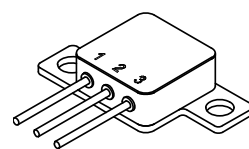
NOTES:

- ^{1/} For ordering information, price, and availability, contact factory.
^{2/} Screening based on MIL-PRF-19500. Screening flows available on request..
^{3/} Both legs tied 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.

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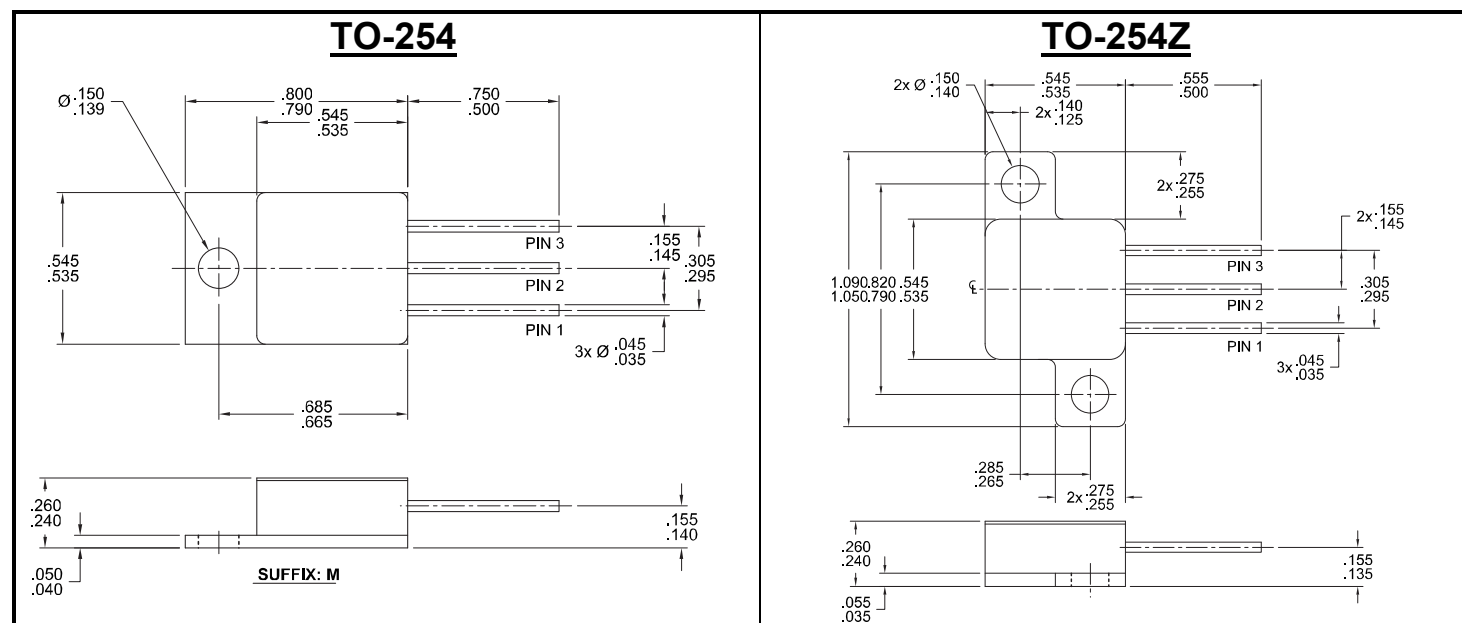


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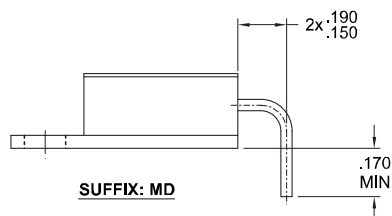
SSR80150CTM&Z thru SSR80200CTM&Z

ELECTRICAL CHARACTERISTICS per leg	Symbol	-55	25	100	125	150	Unit
Instantaneous Forward Voltage Drop typical ($I_F = 5$ Amps, 300 μ sec Pulse) maximum	V_F	765 -	690 790	575 -	540 650	490 -	mVolts
Instantaneous Forward Voltage Drop typical ($I_F = 15$ Amps, 300 μ sec Pulse) maximum	V_F	980 -	815 900	720 -	680 750	650 -	mVolts
Instantaneous Forward Voltage Drop typical ($I_F = 25$ Amps, 300 μ sec Pulse) maximum	V_F	1300 -	900 960	825 -	790 850	760 -	mVolts
Instantaneous Forward Voltage Drop typical ($I_F = 40$ Amps, 300 μ sec Pulse) maximum	V_F	1500 -	1000 1050	960 -	940 1000	920 -	mVolts
Reverse Leakage Current typical (Rated V_R , 300 μ sec pulse minimum) maximum	I_R	0.0001 -	0.001 0.01	0.5 -	2 10	10 -	mA
Junction Capacitance typical ($V_R = 10 V_{DC}$, $T_A = 25^\circ C$, $f = 1$ MHz) maximum	C_J	-	400 500	-	-	-	pF

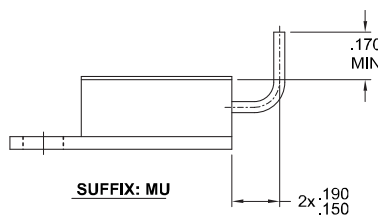


Optional Lead Bent Configuration

Down Bent (DB Suffix)



Up Bent (UB Suffix)



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	AC	Anode
DR	Doubler, Reverse	Anode	AC	Cathode

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

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