



SOLID STATE DEVICES, INC.

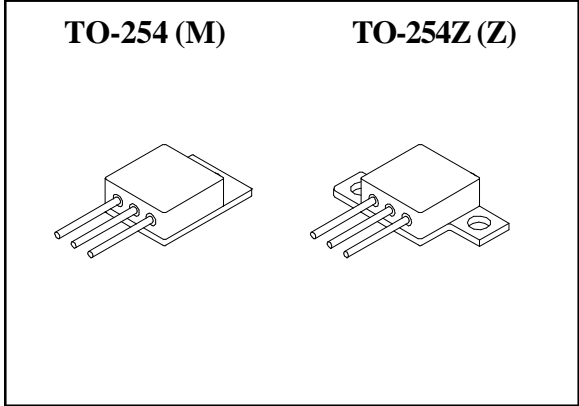
14830 Valley View Blvd * La Mirada, Ca 90638
 Phone: (562) 404-7855 * Fax: (562) 404-1773

**SSR1008M & Z
 SSR1009M & Z
 SSR1010M & Z**

Designer's Data Sheet

**10AMPS
 80 - 100 VOLTS
 SCHOTTKY
 RECTIFIER**

- FEATURES:**
- Extremely Low Forward Voltage Drop
 - Low Reverse Leakage
 - Hermetically Sealed Package
 - Guard Ring for Overvoltage Protection
 - Eutectic Die Attach
 - 175°C Operating Junction Temperature
 - For TO-254Z Package Specify "Z" Suffix.
 - Also available in following configurations
 Doubler: SSR1008DM & DZ
 SSR1009DM & DZ
 SSR1010DM & DZ
 - TX, TXV and Space Level Screening Available



Maximum Ratings		SYMBOL	VALUE	UNITS
Peak Repetitive Reverse and DC Blocking Voltage	SSR1008M & Z	V_{RRM}	80	Volts
	SSR1009M & Z	V_{RWM}	90	
	SSR1010M & Z	V_R	100	
Average Rectified Forward Current. (Resistive load, 60Hz, Sine Wave, $T_A = 25^\circ\text{C}$)		I_o	10	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on I_o , allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$)		I_{FSM}	200	Amps
Operating and Storage Temperature		$T_{OP} \& T_{stg}$	-65 TO +175	°C
Maximum Thermal Resistance Junction to Case		R_{qJC}	1.7	°C/W

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

DATA SHEET #: RS0205J

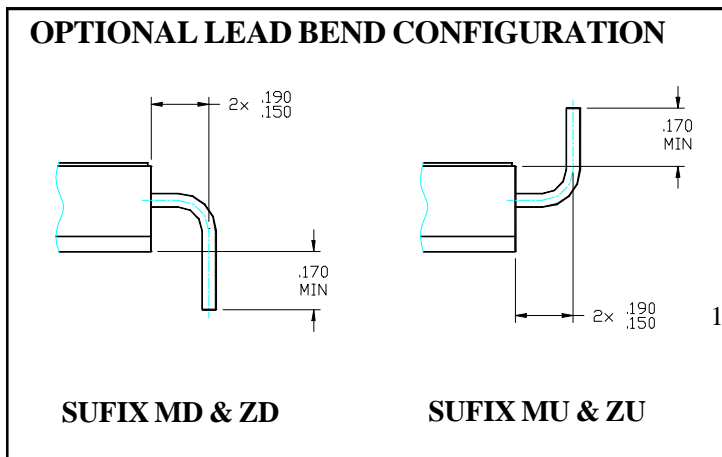
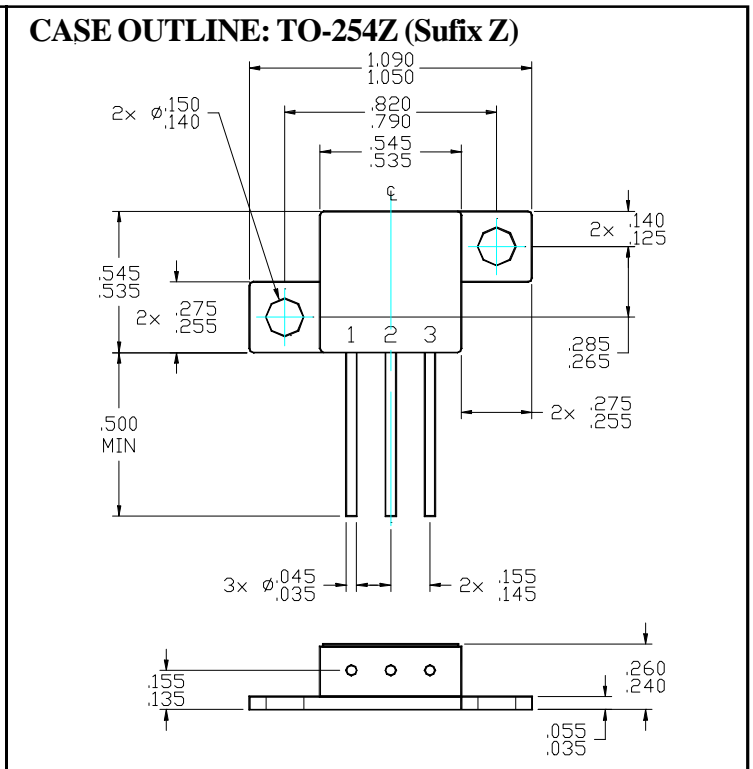
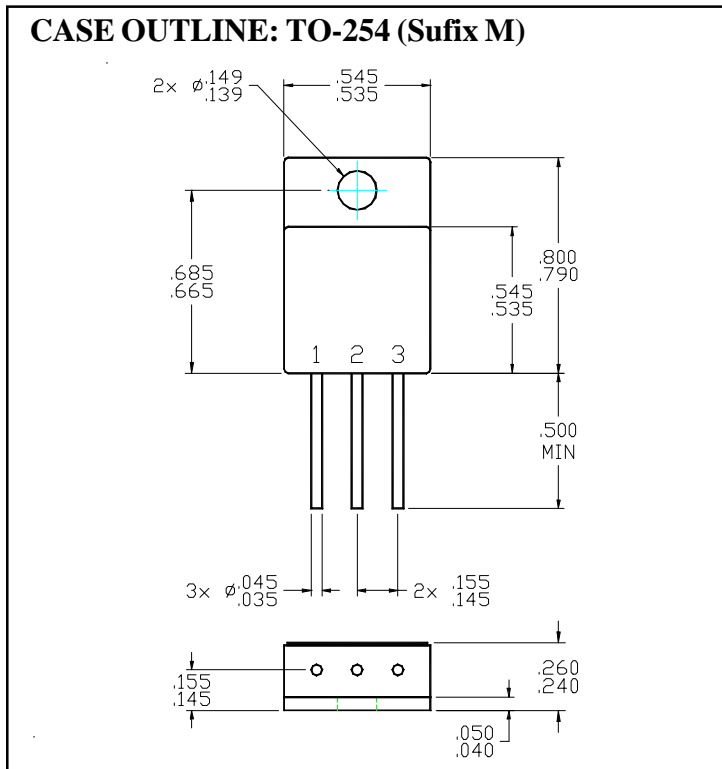
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Electrical Characteristics (Per Leg)		SYMBOL	MINIMUM	MAXIMUM	UNITS
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300 μsec Pulse)	$I_F = 1\text{A}$	V_{F1}	--	0.60	V_{DC}
	$I_F = 5\text{A}$	V_{F2}	--	0.77	
	$I_F = 10\text{A}$	V_{F3}	--	0.87	
Instantaneous Forward Voltage Drop ($I_F = 10\text{A}$, 300 μsec pulse)	$T_A = 100^\circ\text{C}$	V_{F4}	--	0.77	V_{DC}
	$T_A = -55^\circ\text{C}$	V_{F5}	--	0.95	
Reverse Leakage Current (Rated V_R , 300 μs pulse min.)	$T_A = 25^\circ\text{C}$	I_{R1}	--	100	mA
	$T_C = 100^\circ\text{C}$	I_{R2}	--	7.5	mA
Junction Capacitance ($V_R = 10V_{DC}$, $T_A = 25^\circ\text{C}$, $f = 1\text{MHz}$)		C_J	--	400	pF



PIN ASSIGNMENT

CODE	FUNCTION	PIN 1	PIN 2	PIN 3
--1/	Rectifier	Cathode	Anode	Anode
D	Doubler	Cathode	Common	Anode
DR	Doubler, Reverse	Anode	Common	Cathode

1/ Note: Pins 2 and 3 must be externally connected for best performance.