



Solid State Devices, Inc.

14701 Firestone Blvd * La Mirada, Ca 90638
 Phone: (562) 404-4474 * Fax: (562) 404-1773
 ssdi@ssdi-power.com * www.ssdi-power.com

**SSR4045CTM
 SSR4045CTZ**

**40 AMP, 45 VOLTS
 POSITIVE CENTERTAP
 SCHOTTKY RECTIFIER**

Designer's Data Sheet

Part Number/Ordering Information ^{1/}
SSR4045 CT M TX

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

Lead Bend:
 — = Straight
 UB = Up Bend
 DB = Down Bend

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

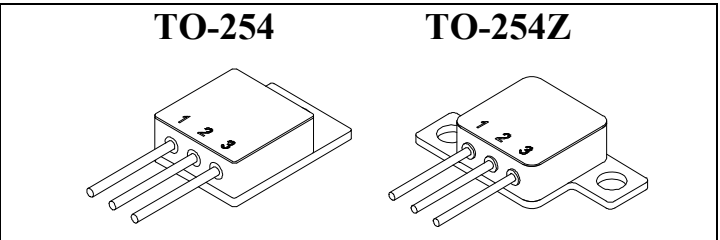
Configuration:
 CT = Common Cathode
 CA = Common Anode
 D = Doubler

- FEATURES:**
- Low Forward Voltage Drop
 - Low Reverse Leakage
 - Guard Ring for Overvoltage Protection
 - Isolated Hermetically Sealed Power Package
 - Available in Glass or Ceramic Seal Packages
 - Eutectic Die Attach
 - 175°C Operating Temperature
 - TX, TXV, or Space Level Screening Available

MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TC=55°C) ^{3/}	I_O	40	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave, TA=25°C) ^{3/}	I_{FSM}	600	Amps
Operating and Storage Temperature	T_{OP} & T_{STG}	-65 to +175	°C
Maximum Thermal Resistance	Junction to Case ^{4/}	1.0	C/W
	Junction to Case ^{5/}	2.0	

NOTES:
^{1/} For ordering information, price, and availability, contact factory.
^{2/} Screening per MIL-PRF-19500
^{3/} Both legs tied together. For doubler configuration, value shall be half of the value shown, tested per leg
^{4/} Both legs tied together. For doubler configuration, both dies tested in series
^{5/} Per leg





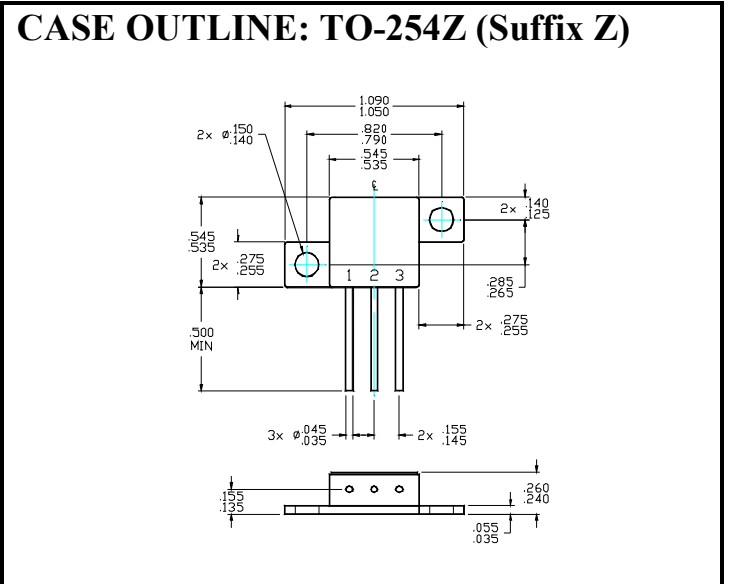
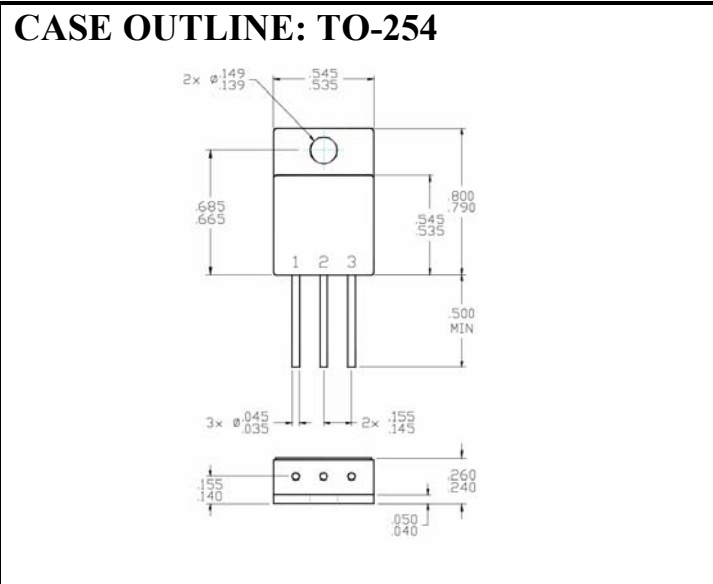
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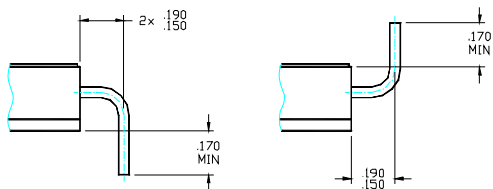
SSR4045CTM
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ELECTRICAL CHARACTERISTICS ^{5/}

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($T_A = 25^\circ\text{C}$, 300-500 μsec Pulse)	$I_F = 5\text{A}$	V_{F1}	0.52
	$I_F = 10\text{A}$	V_{F2}	0.60
	$I_F = 20\text{A}$	V_{F3}	0.77
Instantaneous Forward Voltage Drop ($I_F = 10\text{A}$, $T_A = -55^\circ\text{C}$, 300-500 μsec Pulse)		V_{F4}	0.67
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μsec Pulse Minimum)		I_{R1}	200
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μsec Pulse Minimum)		I_{R2}	15
Junction Capacitance ($V_R = 10\text{V}$, $f = 1\text{MHz}$, $T_A = 25^\circ\text{C}$)		C_J	800



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	AC	Anode