



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

SSR8045M SSR8045Z

80 AMP SCHOTTKY RECTIFIER 45 VOLTS

- FEATURES:**
- PIV: 45 Volts
 - Low reverse leakage
 - Low forward voltage drop
 - Guard ring for overvoltage protection
 - Isolated hermetically sealed package
 - Custom lead forming available
 - Eutectic die attach
 - 175°C operating junction temperature
 - TX, TXV, and S level screening available^{2/}

Designer's Data Sheet

Part Number / Ordering Information^{1/}

SSR

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

Lead Bend Options
 DB = Down Bend
 UB = Up Bend

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

Voltage 45 = 45 V

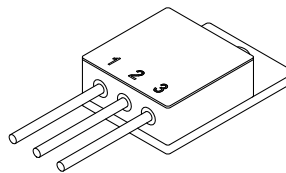
Current 80 = 80 A

MAXIMUM RATINGS ^{3/}	Symbol	Value	Units
Peak Repetitive Reverse and DC Blocking Voltage	V_{RRM} V_{RWM} V_R	45	Volts
Average Rectified Forward Current (Resistive load, 60 Hz, sine wave, $T_C = 55^\circ\text{C}$) ^{4/}	I_O	80	Amps
Peak Surge Current (8.3 ms pulse, half sine wave, allow junction to reach equilibrium between pulses, $T_A = 25^\circ\text{C}$) ^{4/}	I_{FSM}	600	Amps
Operating & Storage Temperature	T_{OP} & T_{stg}	-65 to +175	°C
Maximum Thermal Resistance (Junction to Case) ^{4/}	$R_{\theta JC}$	0.50	°C/W

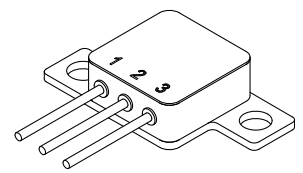
NOTES:

- 1/ For ordering information, price, and availability - contact factory.
- 2/ Screening based on MIL-PRF-19500. Screening flows available on request.
- 3/ Unless otherwise specified, all electrical characteristics @25°C.
- 4/ Both anode legs together.

TO-254 (M)



TO-254Z (Z)



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

DATA SHEET #: RS0004D

DOC

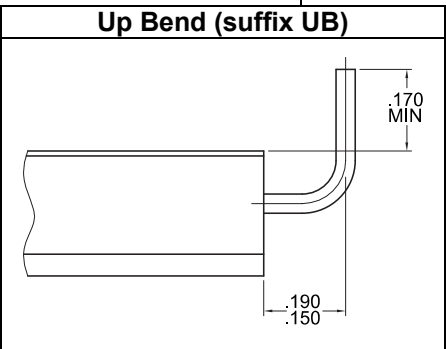
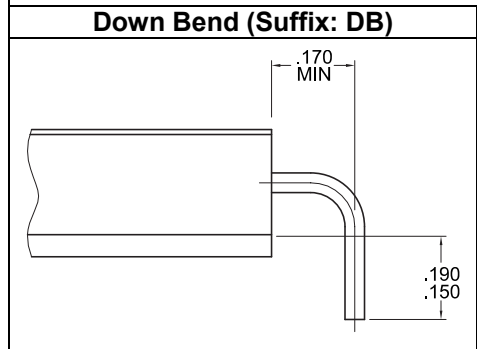
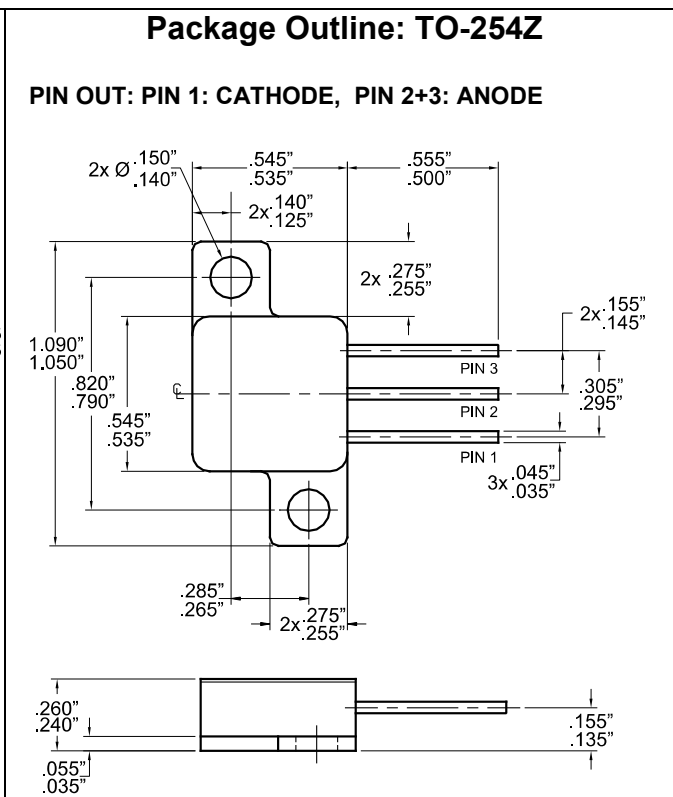
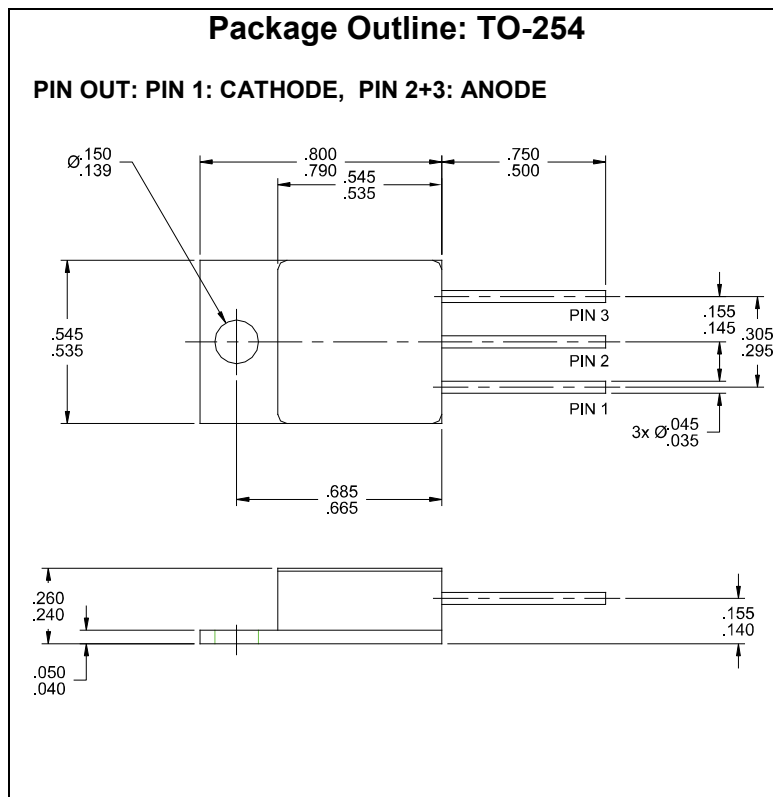


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ELECTRICAL CHARACTERISTICS ^{3/4}		Symbol	Min	Typ	Max	Units
Instantaneous Forward Voltage Drop (T _A = 25°C, 300 – 500 µsec pulse)	I _F = 20 A	V _{F1}	-	0.45	0.53	V _{DC}
	I _F = 40 A	V _{F2}	-	0.55	0.65	
	I _F = 80 A	V _{F3}	-	0.65	0.90	
Instantaneous Forward Voltage Drop (T _A = -55°C, 300 – 500 µsec pulse)	I _F = 40 A	V _{F4}	-	0.70	0.75	V _{DC}
Reverse Leakage Current (Rated V _R , T _A = 25°C, 300 µsec pulse minimum)		I _{R1}	-	50	400	µA
Reverse Leakage Current (Rated V _R , T _A = 100°C, 300 µsec pulse minimum)		I _{R2}	-	15	30	mA
Junction Capacitance (V _R = 10V, f = 1MHz, T _A = 25°C)		C _J	-	5000	5500	pF



Optional Lead Bend Configurations

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