



PRELIMINARY

SOLID STATE DEVICES, INC

14849 Firestone Boulevard · La Mirada, CA 90638
Phone: (714) 670-SSDI (7734) · Fax: (714) 522-7424SSR4045M
SSR4045Z

Designer's Data Sheet

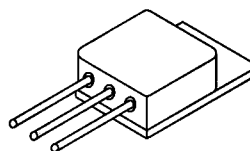
FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Isolated Hermetically Sealed Power Package
- Ceramic Seals for Improved Hermeticity
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature

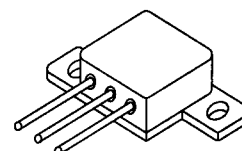
- TX, TXV and Space Level Screening Available

40 AMP
45 VOLTS
SCHOTTKY
RECTIFIER

TO-254



TO-254Z



MAXIMUM RATINGS

RATING	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse and DC Blocking Voltage	VRRM VRWM VR	45	Volts
Average Rectified Forward Current (Resistive Load, 60Hz, Sine Wave, TA=25°C)	IO	40	Amps
Peak Surge Current (8.3 ms Pulse, Half Sine Wave Superimposed on IO, allow junction to reach equilibrium between pulses, TA=25°C)	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	0.9	°C/W

Available with Glass or Ceramic Seals. Contact Factory for Details.

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

DATA SHEET#: RS0041 C

MED

SSR4045M SSR4045Z

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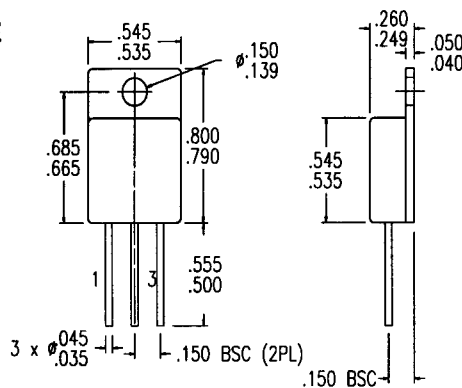
ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 20 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 40 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF1	0.52 0.63 0.85	Vdc
Instantaneous Forward Voltage Drop ($I_F = 20 \text{ Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF2	0.73	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR1	400	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	IR2	30	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	CJ	1600	pf

CASE OUTLINE: TO-254

PIN OUT:

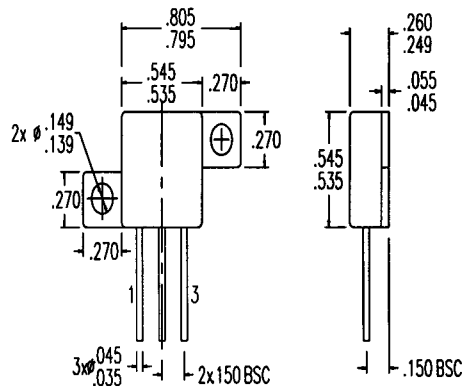
- 1: CATHODE
- 2: ANODE
- PIN 3: ANODE



CASE OUTLINE: TO-254Z

PIN OUT:

- PIN 1: CATHODE
- PIN 2: ANODE
- PIN 3: ANODE



TYPICAL OPERATING CURVES

($T_A = 25^\circ\text{C}$ Unless otherwise specified)

