



PRELIMINARY

SOLID STATE DEVICES, INC

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

SSR4045CTC

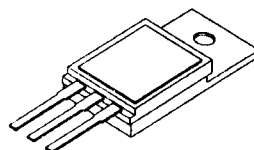
Designer's Data Sheet

FEATURES:

- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Isolated Hermetically Sealed Power Package
- Low inductance leads
- Ideal for High Frequency Applications
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
- Also available in following configurations:
 - Common Anode: SSR4045CAC
 - Doubler: SSR4045DC
- TX, TXV, and Space Level Screening Available

40 AMP
45 VOLTS
POSITIVE CENTERTAP
SCHOTTKY
RECTIFIER

CERAMIC TO-254



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) note 1	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) note 1	IFSM	600	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case, note 1	RθJC	0.9	°C/W

NOTE 1: Both legs tied together

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

DATA SHEET #: RS0033 B

MED

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ELECTRICAL CHARACTERISTICS (Per Leg)

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 10 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 20 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF1	0.50 0.60 0.80	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ A dc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF2	0.67	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR1	200	μA
Reverse Leakage Current (Rated V_R , $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	IR2	15	mA
Junction Capacitance ($V_R = 10 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	CJ	800	pf

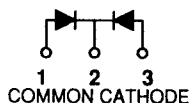
CASE OUTLINE: CERAMIC TO-254

SSR4045CTC

PIN 1: ANODE 1

PIN 2: CATHODE

PIN 3: ANODE 2

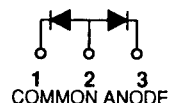


SSR4045CAC

PIN 1: CATHODE 1

PIN 2: ANODE

PIN 3: CATHODE 2

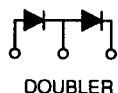


SSR4045DC (note 2)

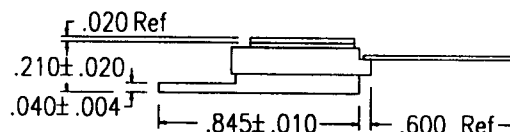
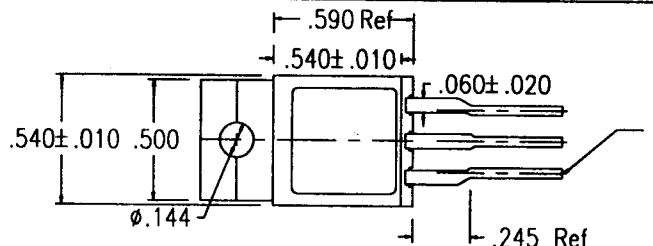
PIN 1: CATHODE

PIN 2: CATHODE 1/ANODE 2

PIN 3: ANODE



NOTE 2: Consult factory for Doubler Specification



TYPICAL OPERATING CURVES

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

