



PRELIMINARY

SOLID STATE DEVICES, INC

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

Designer's Data Sheet

FEATURES:

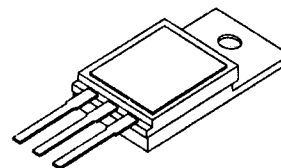
- Low Reverse Leakage
- Low Forward Voltage Drop
- Guard Ring for Overvoltage protection
- Isolated Hermetically Sealed Power Package
- Low inductance leads
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature

- TX, TXV and Space Level Screening Available

SSR1645C

**20 AMP
45 VOLTS
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)	IO	20	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	300	Amps
Operating and storage temperature	Top & Tstg	-65 to +175	°C
Maximum Thermal Resistance Junction to Case	RθJC	1.5	°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#: RS0019 A

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SSR1645C

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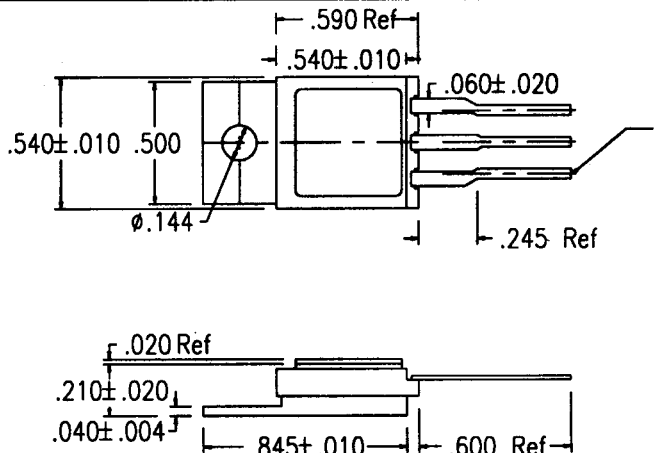
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ELECTRICAL CHARACTERISTICS

CHARACTERISTICS	SYMBOL	MAXIMUM	UNIT
Instantaneous Forward Voltage Drop ($I_F = 5 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 10 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 20 \text{ Adc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF1	0.50 0.55 0.70	Vdc
Instantaneous Forward Voltage Drop ($I_F = 10 \text{ Adc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF2	0.62	Vdc
Reverse Leakage Current (Rated VR, $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR1	200	μA
Reverse Leakage Current (Rated VR, $T_A = 100^\circ\text{C}$, 300 μs pulse minimum)	IR2	15	mA
Junction Capacitance (VR = 10 Vdc, $T_A = 25^\circ\text{C}$, f = 1 MHz)	CJ	800	pf

CASE OUTLINE: CERAMIC TO-254

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



TYPICAL OPERATING CURVES

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

