



PRELIMINARY

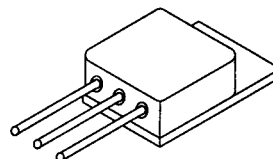
SOLID STATE DEVICES, INC

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
- Ceramic Seals for Improved Hermeticity
- Custom Lead Forming Available
- Eutectic Die Attach
- 175°C Operating Temperature
- Also available in the following configurations:
 - Common Anode: SSR4045CAM
 - Doubler: SSR4045DM
- TX, TXV, and Space Level Screening Available

1N6660
MIL-S-19500/608**40 AMP
45 VOLTS
POSITIVE CENTERTAP
SCHOTTKY
RECTIFIER**

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

MIL-S-19500/608 built with Ceramic Seals

1N6660 Available with Glass or Ceramic Seals. Contact Factory for Details.

Electrical characteristics differ from the JEDEC Registration

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

DATA SHEET #: RS0029 C

MED

1N6660

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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) ($I_F = 15 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse) ($I_F = 30 \text{ A dc}$, $T_A = 25^\circ\text{C}$, 300 μs Pulse)	VF1	0.55 0.75 1.0	Vdc
Instantaneous Forward Voltage Drop ($I_F = 15 \text{ A dc}$, $T_A = -55^\circ\text{C}$, 300 μs Pulse)	VF2	0.80	Vdc
Reverse Leakage Current (Rated V_R , $T_A = 25^\circ\text{C}$, 300 μs pulse minimum)	IR1	1	mA
Reverse Leakage Current (Rated V_R , $T_A = 125^\circ\text{C}$, 300 μs pulse minimum)	IR2	40	mA
Junction Capacitance ($V_R = 5 \text{ Vdc}$, $T_A = 25^\circ\text{C}$, $f = 1 \text{ MHz}$)	CJ	2000	pf

CASE OUTLINE: TO-254

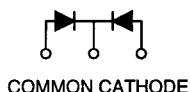
1N6660:

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

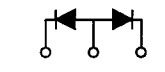
SSR4045CAM
PIN 1: CATHODE 1
PIN 2: ANODE
PIN 3: CATHODE 2

SSR4045DM
PIN 1: CATHODE
PIN 2: AC
PIN 3: ANODE

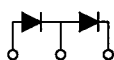
NOTE 2: Consult the factory for Doubler specifications



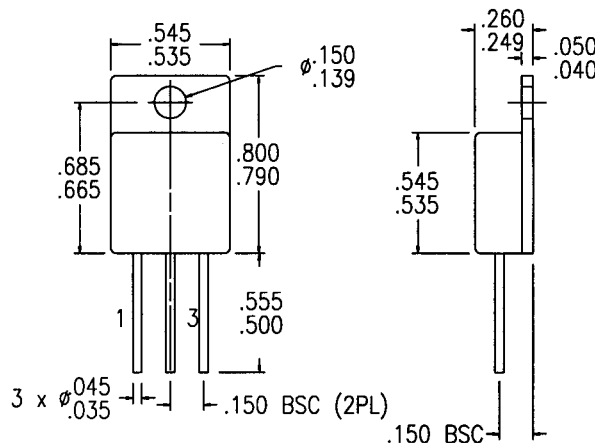
COMMON CATHODE



COMMON ANODE



DOUBLER



TYPICAL OPERATING CURVES

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

