



TYPE 5027G

HALF-WAVE RECTIFIER/VOLTAGE DOUBLER

Indirectly-heated Cathode

Heater Voltage (Entire Heater - pins 2 and 7) .....	50.0 volts
Pilot Lamp Section (Pins 6 and 7) .....	2.0 volts
Heater Current (Entire Heater) .....	0.150 amp.
DC Output Current per Plate .....	65 max. ma.
(With rectified plate current through pilot lamp section of heater shunted by 2.9 volt 0.170 amp pilot)	
Pilot Lamp Voltage (RMS) (See Circuits A and B) .....	2.5 max. volts.
Tube Voltage Drop (at 150 ma. DC per Plate .....	21 volts
without pilot lamp connections)	

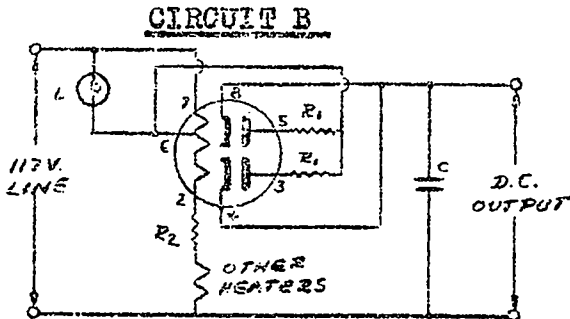
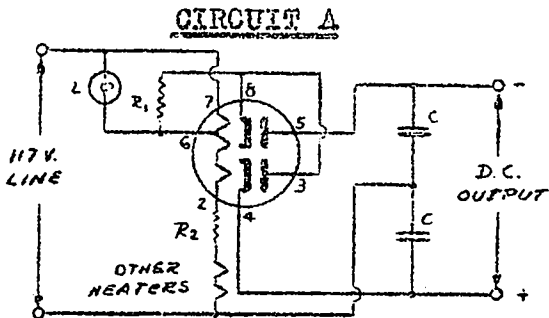
VOLTAGE DOUBLER:

AC Plate Voltage (RMS) per Plate .....	117 max. volts
DC Output Current (See Circuit A) .....	65 max. ma.
Peak Plate Current .....	400 max. ma.
Resistor per Plate or Cathode ( $R_1$ ) .....	25 min. ohms

HALF-WAVE RECTIFIER:

Condenser Input

AC Plate Voltage (RMS) .....	117 max. volts
DC Output Current per Plate (See Circuit B) .....	65 max. ma.
Peak Plate Current per Plate .....	400 max. ma.
*Resistor per Plate ( $R_1$ ) .....	25 min. ohms



- L = Pilot Lamp #292 or #292A (2.9v .170A)
- $R_1$  = Peak Limiting Resistor
- $R_2$  = Surge Limiting Resistor
- C = Filter Condensers

Heater Current through string should be adjusted to .150 amp at 117 V. line in both circuits.

\*In half-wave circuit an alternative is to use 25 ohms common to both plates, resulting in slightly less output voltage.

NATIONAL UNION

TYPE 50Z7G

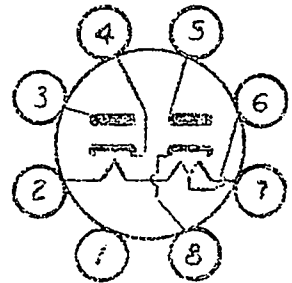
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MECHANICAL DATA:

Max. Overall Length .....	4-1/8"
Max. Seated Height .....	3-9/16"
Max. Diameter .....	1-9/16"
Bulb .....	ST12
Base .....	Small Octal 7-Pin

BASING:

- Pin No. 1 - No Connection
- Pin No. 2 - Heater
- Pin No. 3 - Plate No. 2
- Pin No. 4 - Cathode No. 2
- Pin No. 5 - Plate No. 1
- Pin No. 6 - Heater Tap (Pilot Lamp  
across Pins 6 and 7)
- Pin No. 7 - Heater
- Pin No. 8 - Cathode No. 1



8 A 11  
BASE- Bottom View

In half-wave rectifier service, a load current of 100 ma. will give 2.5 volts RMS across the #292 or #292A pilot lamp as shown in Circuit B.