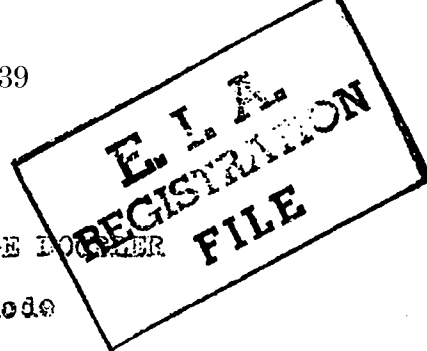


NATIONAL UNION

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)	

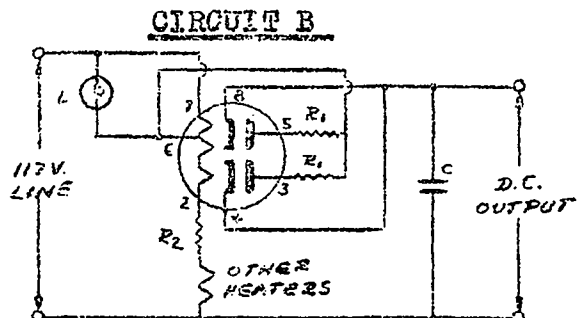
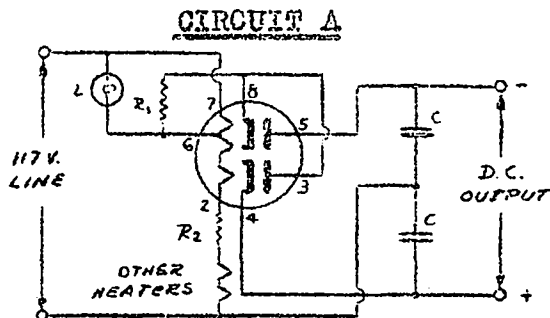
VOLTAGE DOUBLER:

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

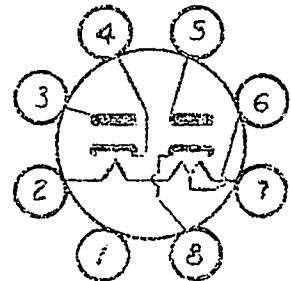
-2-

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 A11
 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.