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 (R1) ......................... 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 (R1) .................................. 25 min. ohms

CIRCUIT A

L = Pilot Lamp 292 or 292A (2.9V 0.170A)
R1 = Peak Limiting Resistor
R2 = 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.
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

In half-wave rectifier service, a load current of 100 ma. will give 2.5 volts RMS across the 8022 or 8092A pilot lamp as shown in Circuit B.