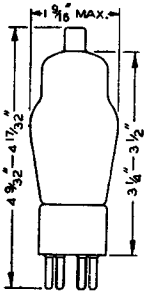
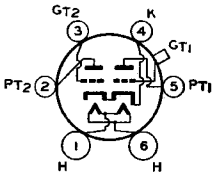


RCA-79

CLASS B TWIN AMPLIFIER



The 79 is a heater-cathode type of tube combining in one bulb two high-mu triodes designed for Class B operation. It is intended for use in the audio-output stage of radio receivers with 6.3-volt heater supply. The triode units have separate external terminals for all electrodes except the cathode and heater so that circuits employing the 79 are similar to those of Class B amplifiers utilizing individual tubes in the output stage.

CHARACTERISTICS

Heater Voltage (A. C. or D. C.)	6.3	Volts
Heater Current	0.6	Ampere
Bulb		ST-12
Cap		Small Metal
Base		Small 6-Pin

As Class B Power Amplifier

Plate Voltage		250 *max.*	Volts
Peak Plate Current (Per Plate)		90 *max.*	Milliamperes
Average Plate Dissipation		11.5 *max.*	Watts
Typical Operation			
Plate Voltage	180	250	Volts
Grid Voltage	0	0	Volts
Zero-Signal Plate Current (Per plate)	3.8	5.3	Milliamperes
Effective Load Resistance (Plate-to-plate)	7000	14000	Ohms
Power Output (Approximate)*	5.5	8.0	Watts

* With average power input of 380 milliwatts applied between grids.

INSTALLATION AND APPLICATION

The **base** pins of the 79 fit the standard six-contact socket which may be installed to operate the tube either in a vertical or in a horizontal position. Sufficient ventilation should be provided to circulate air freely around the tube to prevent overheating.

For **heater** operation and **cathode** connection, refer to INSTALLATION on type 6A8.

As a **Class B power amplifier,** the 79 is used in circuits similar in design to those utilizing individual tubes in the output stage. It requires no grid-bias, since the high-mu feature of the triode units reduces the steady plate current at zero bias to only a few milliamperes. Refer to page 20 for general Class B amplifier design considerations.

As a **Class A amplifier,** the 79 may be used with grid-bias voltage for small input signals. Such applications include circuits employing the two triode units either in parallel or in push-pull connection.

In other applications, the two triode units of the 79 may be used in various circuits to combine the functions of oscillation, detection and/or amplification.

A family of plate characteristic curves is given on page 156.

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page	sheet	date
1	154	1937
2	FP	1999.10.10