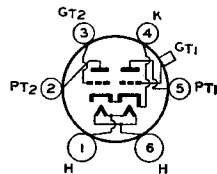


RCA-79

CLASS B TWIN AMPLIFIER



The 79 is a heater-cathode type of tube combining in one bulb two high- μ 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- μ 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.