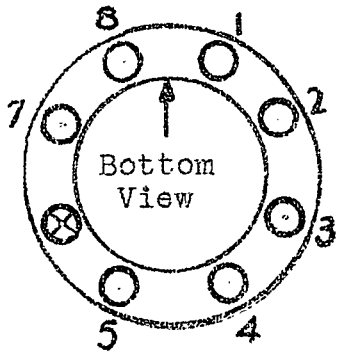
GENERAL DESCRIPTION

APPLICATION:

The Hytron Bantam 6AC6GT is a cathode type power amplifier twin triode, internally connected in such manner that dynamic coupling is accomplished between the input triode and the output triode. Because of its many unique design features, the 6AC6GT affords high plate efficiency at low relative distortion and is essentially free of many of the defects generally attending the use of pentodes in similar applications. The dynamic coupled feature facilitates ease of application because of the simplicity of circuit components and the tube's small dimensions.

The Hytron Bantam 6AC6GT is a glass tube equipped with a seven pin intermediate bakelite octal base.

PHYSICAL CHARACTERISTICS: Bulb T-9D



Base Pin Connections

Pin 1 - No connection
Pin 2 - Heater
Pin 3 - Output Plate
Pin 4 - Input Plate
Pin 5 - Input Grid
Pin 7 - Heater
Pin 8 - Output Cathode

RATINGS AND CHARACTERISTICS

Heater Voltage (AC or DC)	6.3 volts
Heater Current	1.1 amps.
Maximum Overall Length	3-5/16"
Maximum Seated Height	2-3/4"
Maximum Diameter	1-5/16"
Base	7-pin intermediate bakelite octal
Basing	7W-0-0

STATIC CHARACTERISTICS

Input Plate	180 volts max.
Output Plate	180 volts max.
Grid Bias	0 volts
Input Plate Current	7.0 ma.
Output Plate Current	45.0 ma.
Plate Resistance	18000 ohms
Mutual Conductance	3000 umhos
Amplification Factor	54

TYPICAL OPERATING CONDITIONS

(Single Tube)

Output Plate Supply Voltage	180 volts
Input Plate Supply Voltage	180 volts
Output Plate Dissipation	10 watts max.
External Grid Bias#	0 volts*
Input Plate Current (zero signal)	7.0 ma.
Input Plate Current (rated signal)	13.0 ma.
Output Plate Current (zero signal)	45.0 ma.
Output Plate Current (rated signal)	47.0 ma.
Load Resistance	3500 ohms
Input Signal (for rated P.O.)	18 volts (RMS)
Power Output**	3.6 watts
Total Harmonic Distortion	9%

(Two Tubes Push-Pull)

Output Plate Supply Voltage	180 volts
Input Plate Supply Voltage	180 volts
External Grid Bias#	0 volts*
Output Plate Current (zero signal)	90 ma.
Output Plate Current (rated signal)	102 ma.
Input Plate Current (zero signal)	14 ma.
Input Plate Current (rated signal)	25 ma.
Load Resistance (Plate to Plate)	5000 ohms
Power Output	9 watts
Total Harmonic Distortion	10%
Input Signal (for rated P.O.) grid to grid	46 volts (RMS)

* The bias voltage for the input triode is developed through internal connection and results from the voltage drop occasioned between the grid of the output triode and ground. The input impedance of the output triode grid is essentially the controlling factor. The bias voltage of the output triode is of such nature that the grid of the output triode operates in the positive region.

** A power output of 4.3 watts may be obtained if the signal flow to the input triode is increased to the point of grid current flow. Distortion is approximately 16% under these conditions.

\# DC series resistance in grid return should not exceed .5 megohm

Note: The Hytron Corporation assumes no liability for the use of the dynamic coupled circuit or applications of tubes designed for use in same.