

ATELIERS BELVU  
6BS5  
BEAM POWER AMPLIFIER

Ateliers Belva 6BS5 is a 9-pin miniature type beam power amplifier providing high power sensitivity and high power output with comparatively low supply voltage. This tube is especially useful in audio frequency, video, and vertical deflection amplifiers particularly on receivers utilizing a wide-angle kinescope.

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . . 6.3 volts  
Current . . . . . 0.75 amp.

Direct Interelectrode Capacitances:

Grid No. 1 to Plate . . . . . 0.3 max uuf  
Input . . . . . 9.5 uuf  
Output . . . . . 4.5 uuf

Mechanical:

Mounting Position . . . . . Any  
Bulb . . . . . T-6-1/2  
Base . . . . . Miniature Button 9-Pin

AF POWER AMPLIFIER

Typical Operation and Characteristics:

|                                             |          |        |
|---------------------------------------------|----------|--------|
| Plate Voltage . . . . .                     | 250      | volts  |
| Grid No. 2 (screen) Voltage . . . . .       | 250      | volts  |
| Grid No. 1 (control grid) Voltage . . . . . | -7.5     | volts  |
| Zero Signal Plate Current . . . . .         | 50       | ma     |
| Zero Signal Grid No. 2 Current . . . . .    | 6        | ma     |
| Amplification Factor . . . . .              | 120      |        |
| Plate Resistance (approx) . . . . .         | 17000    | ohms   |
| Transconductance . . . . .                  | 7000     | umhos  |
| Load Resistance . . . . .                   | 5000     | ohms   |
| Cathode Bias Resistor . . . . .             | 340      | ohms   |
| AF Grid No. 1 Voltage (RMS) . . . . .       | 5.35     | volts  |
| Total Harmonic Distortion . . . . .         | 6 max    | %      |
| Max. Signal Power Output . . . . .          | 4.5      | watts  |
| Plate Dissipation . . . . .                 | 12.5 max | watts  |
| Grid No. 2 Dissipation . . . . .            | 2 max    | watts  |
| Grid No. 1 Circuit Resistance:              |          |        |
| For Fixed Bias . . . . .                    | 0.1 max  | megohm |
| For Cathode Bias . . . . .                  | 0.5 max  | megohm |

ATELIERS BELVU  
6B55  
BEAM POWER AMPLIFIER

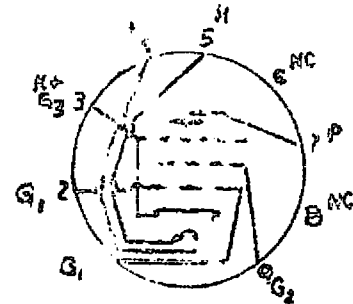
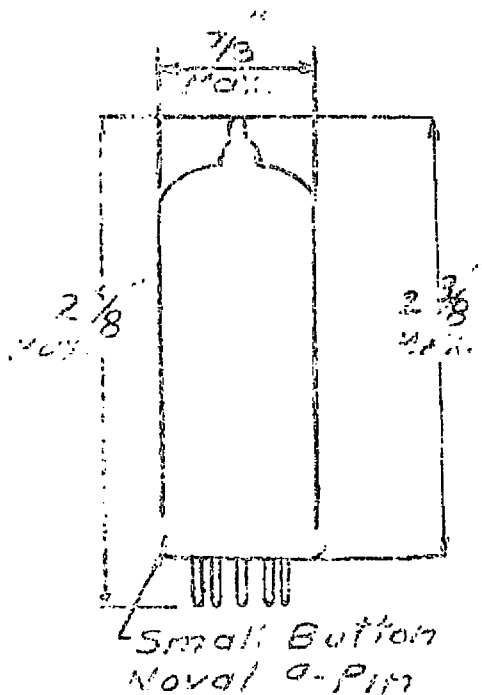
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Peak Heater-Cathode Voltage:

|                                                   |     |       |
|---------------------------------------------------|-----|-------|
| Heater negative with respect to cathode . . . . . | 100 | volts |
| Heater positive with respect to cathode . . . . . | 100 | volts |

Dimensional Outline  
6B55

Socket Connections  
Bottom View  
(Basing No. 9BQ)



- Pin 1 - Grid 1
- Pin 2 - Grid 1
- Pin 3 - Cathode & Grid No. 3
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - No connection
- Pin 7 - Plate
- Pin 8 - No connection
- Pin 9 - Grid No. 2

Type 6BS5

# AVERAGE PLATE CHARACTERISTICS

$E_p = 6.3$  Volts

$E_{g2} = 250$  Volts

$E_{g3} = 0$

$E_{c1} = 0$

-2.5

-5

-7.5

-10

-15

Plate Current Milliamperes

Plate Voltage

## OPERATION CHARACTERISTICS

Total Distortion - %

Grid No. 1 Signal  
Volts RMS

Total Distortion

AF Grid #1

Power Output - Watts

$E_p = 6.3$  V  
 $E_{g2} = 250$  V  
 $E_{c1} = -7.5$  V  
 $R_{load} = 5000$  ohms