

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

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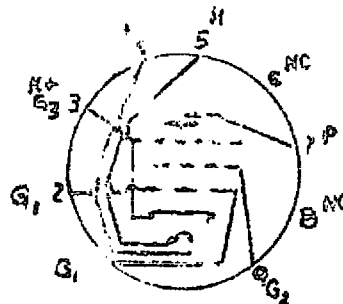
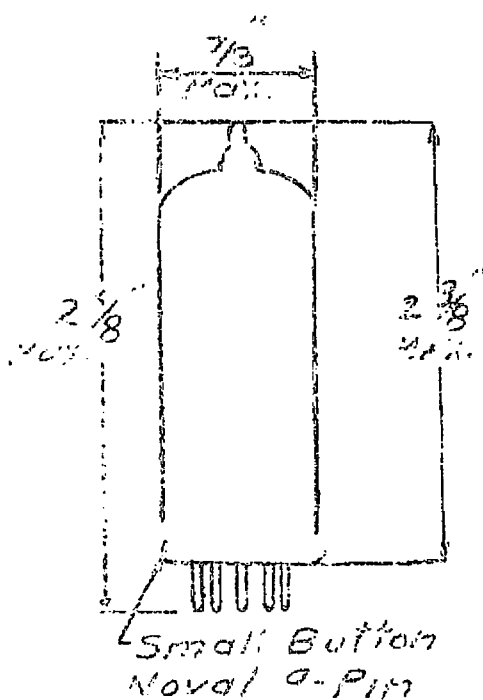
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Peak Heater-Cathode Voltage:

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

Dimensional Outline  
6BS5

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

$E_{B_2} = 250$  Volts

$E_{B_3} = 0$

$E_{C_1} = 0$

-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  
 $E_{B_2} = 250$  V  
 $E_{C_1} = -7.5$  V  
 $R_{load} = 5000$  ohms

