



# 6AU5-GT

## BEAM POWER TUBE

6AU5-GT

### GENERAL DATA

#### Electrical:

Heater, for Unipotential Cathode:

Voltage . . . . .	6.3 . . . . .	ac or dc volts
Current . . . . .	1.25 . . . . .	amp

Direct Interelectrode Capacitances (Approx.):<sup>o</sup>

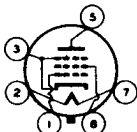
Grid No.1 to plate . . . . .	0.5	$\mu$ f
Grid No.1 to cathode & grid No.3, grid No.2, and heater . . . . .	11.3	$\mu$ f
Plate to cathode & grid No.3, grid No.2, and heater . . . . .	7	$\mu$ f

Transconductance <sup>#</sup> . . . . .	5600	$\mu$ hos
Mu-Factor, Grid No.2 to Grid No.1 <sup>■</sup> . . . . .	5.9	

#### Mechanical:

Mounting Position . . . . .	Any
Maximum Overall Length . . . . .	3-5/16"
Maximum Seated Length . . . . .	2-3/4"
Maximum Diameter . . . . .	1-9/32"
Bulb . . . . .	T-9
Base . . . . .	Intermediate-Shell Octal 6-Pin (JETEC No. B6-8) or Short Intermediate-Shell Octal 6-Pin (JETEC No. B6-60)
Basing Designation for BOTTOM VIEW . . . . .	6CK

Pin 1-Grid No.1  
Pin 2-Heater  
Pin 3-Cathode,  
Grid No.3



Pin 5-Plate  
Pin 7-Heater  
Pin 8-Grid No.2

### HORIZONTAL DEFLECTION AMPLIFIER

For operation in a 525-line, 30-frame system<sup>o</sup>

#### Maximum Ratings, Design-Center Values:

DC PLATE VOLTAGE . . . . .	550 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE* (Absolute maximum) . . . . .	5500 <sup>•</sup> max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE* . . . . .	-1250 max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE <sup>†</sup> . . . . .	200 max.	volts

<sup>o</sup> With no external shield.

<sup>#</sup> For plate volts = 115, grid-no.2 volts = 175, grid-no.1 volts = -20.

<sup>■</sup> For plate volts = 100, grid-no.2 volts = 100, grid-no.1 volts = -4.5.

<sup>□</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.

<sup>\*</sup> The duration of the voltage pulse must not exceed 15 per cent of one horizontal scanning cycle. In a 525-line, 30-frame system, 15 per cent of one horizontal scanning cycle is 10 microseconds.

<sup>•</sup> Under no circumstances should this absolute value be exceeded.

<sup>†</sup> Preferably obtained through a series dropping resistor of sufficient magnitude to limit the grid-no.2 input to the rated maximum value.

→ indicates a change.

6AU5-GT



6AU5-GT

## BEAM POWER TUBE

PEAK NEGATIVE-PULSE GRID-No.1 (CONTROL-GRID) VOLTAGE . . . . .	-300 max.	volts
CATHODE CURRENT:		
Peak . . . . .	400 max.	ma
Average . . . . .	110 max.	ma
GRID-No.2 INPUT . . . . .	2.5 max.	watts
PLATE DISSIPATION <sup>◇</sup> . . . . .	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 <sup>◆</sup> max.	volts
BULB TEMPERATURE (At hottest point) <sup>▲</sup> . . .	210 max.	°C

**Maximum Circuit Values:**

→ Grid-No.1-Circuit Resistance . . . . .	0.47 max.	megohr
--	-----------	--------

**VOLTAGE REGULATOR SERVICE***Triode Connection--Grid No.2 Connected to Plate***Maximum Ratings, Design-Center Values:**

PLATE VOLTAGE . . . . .	300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Negative bias value . . . . .	125 max.	volts
Positive bias value . . . . .	0 max.	volts
CATHODE CURRENT . . . . .	110 max.	ma
PLATE & GRID-No.2 DISSIPATION (Total) . . . . .	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 <sup>◆</sup> max.	volts

<sup>◇</sup> An adequate cathode-bias resistor or other suitable means is required to protect the tube in the absence of excitation.

<sup>◆</sup> The dc component must not exceed 100 volts.

<sup>▲</sup> For tube in vertical position with base down in free space and with natural ventilation, the hottest point on the bulb is in the center of the dome just above open end of cathode sleeve.

→ indicates a change.

NOV. 5, 1954

TUBE DIVISION

DATA 1

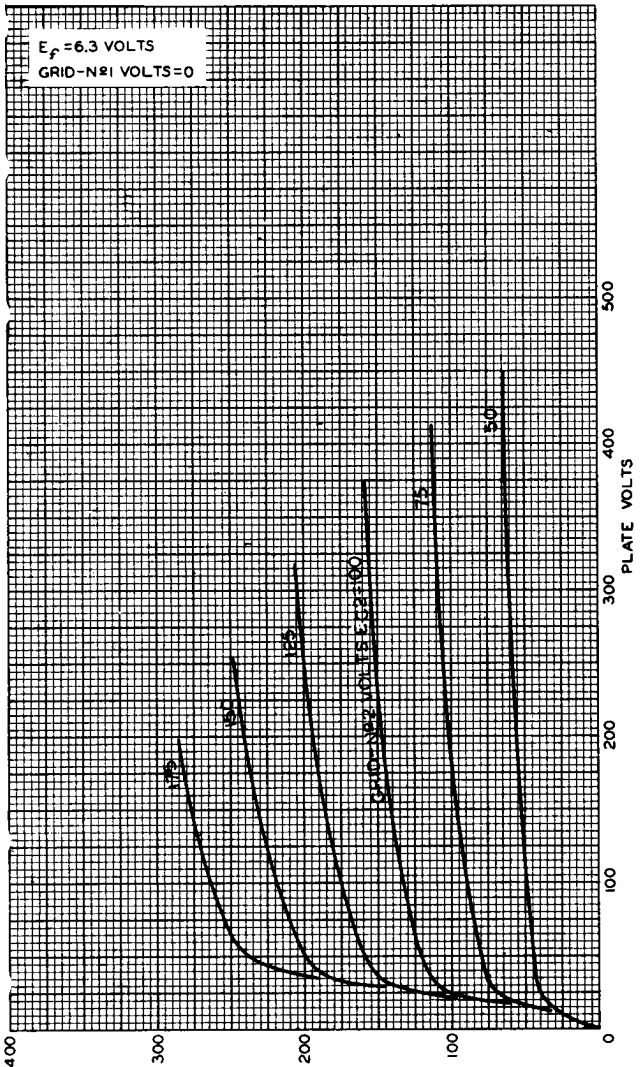
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



6AU5-GT

6AU5-GT

### AVERAGE PLATE CHARACTERISTICS



SEPT. 8, 1949

TUBE DEPARTMENT

92CM-7355

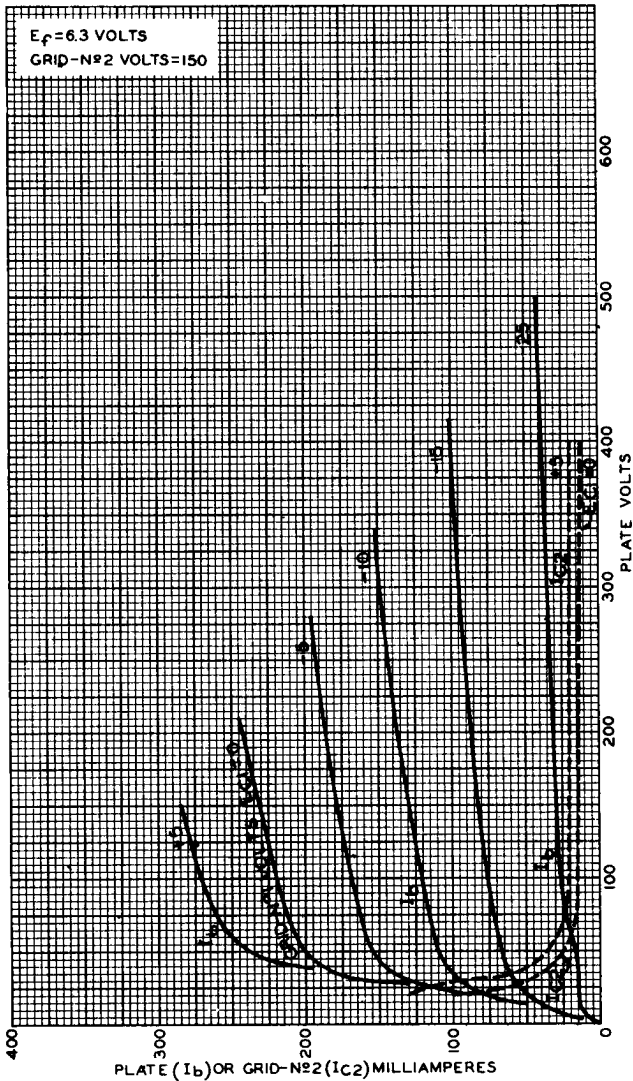
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

6AU5-GT



6AU5-GT

AVERAGE PLATE CHARACTERISTICS



AUG. 29, 1949

TUBE DEPARTMENT  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-7349