



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.):^oGrid No.1 to plate 0.5 μ fGrid No.1 to cathode & grid No.3,
grid No.2, and heater 11.3 μ fPlate to cathode & grid No.3,
grid No.2, and heater 7 μ fTransconductance* 5600 μ hosMu-Factor, Grid No.2 to Grid No.1[■] 5.9

Mechanical:

Mounting Position Any

Maximum Overall Length 3-5/16"

Maximum Seated Length 2-3/4"

Maximum Diameter 1-9/32"

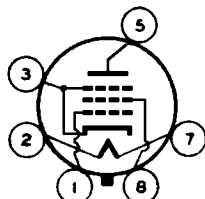
Bulb T-9

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^o

Maximum Ratings, Design-Center Values:

DC PLATE VOLTAGE 550 max. volts

PEAK POSITIVE-PULSE

PLATE VOLTAGE* (Absolute maximum) 5500[●] max. volts

PEAK NEGATIVE-PULSE PLATE VOLTAGE* -1250 max. volts

DC GRID-No.2 (SCREEN) VOLTAGE[†] 200 max. volts^o With no external shield.[■] For plate volts = 115, grid-No.2 volts = 175, grid-No.1 volts = -20.[■] For plate volts = 100, grid-No.2 volts = 100, grid-No.1 volts = -4.5.[□] As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.^{*} 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.[●] Under no circumstances should this absolute value be exceeded.[†] 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.

NOV. 5, 1954

TUBE DIVISION

DATA 1

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

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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 [◇]	10 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode.	200 max.	volts
Heater positive with respect to cathode.	200 [◆] max.	volts
BULB TEMPERATURE (At hottest point) [▲] . . .	210 max.	°C

Maximum Circuit Values:

→ Grid-No.1-Circuit Resistance	0.47 max.	megohm
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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 [◆] max.	volts

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

◆ The dc component must not exceed 100 volts.

▲ 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.

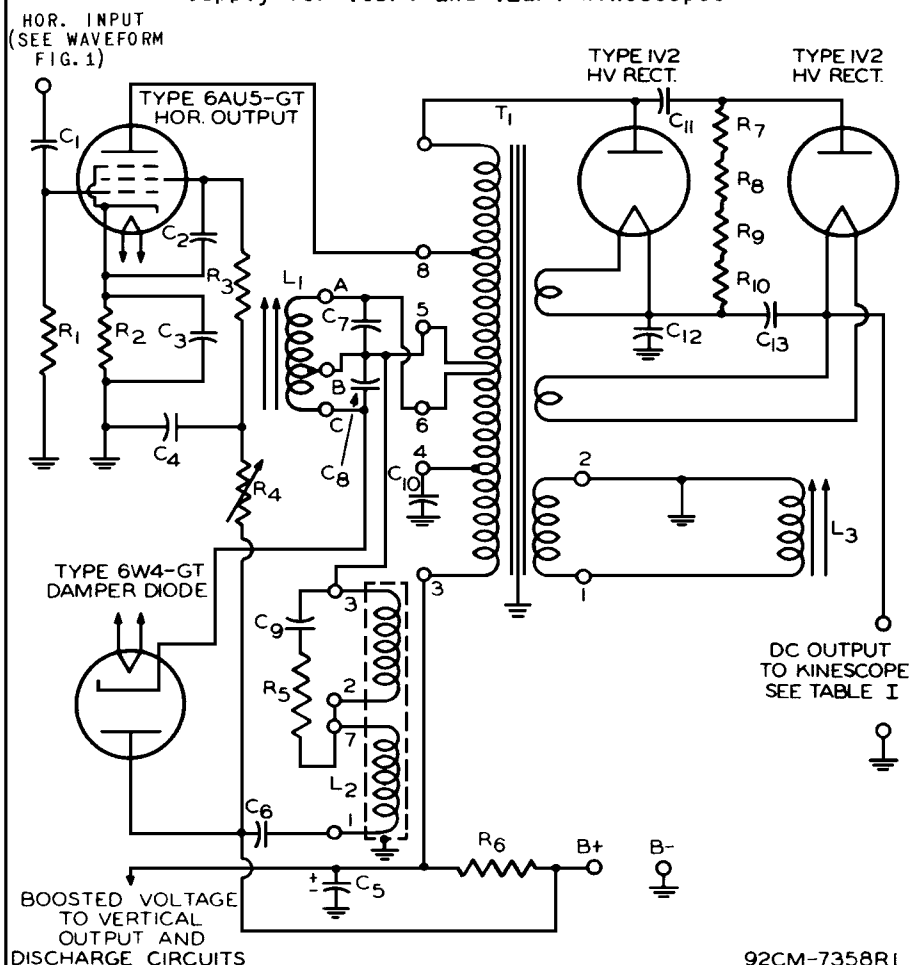


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BEAM POWER AMPLIFIER

Horizontal Deflection Circuit and Pulse-Operated High-Voltage Supply for 10BP4 and 12LP4 Kinescopes



92CM-7358R1

- C1: 1500 μ f, 500 volts
- C2: 0.25 μ f, 300 volts
- C3: 0.25 μ f, 150 volts
- C4: 0.05 μ f, 300 volts
- C5: 20 μ f, 350 volts,
electrolytic
- C6: 0.25 μ f, 600 volts
- C7: 0.03 μ f, 400 volts
- C8: 0.1 μ f, 600 volts
- C9: 57 μ f, 600 volts,
mica or ceramic
- C10: 100 μ f, 2000 volts,
mica or ceramic
- C11: 500 μ f, 6000 volts
- C12: 500 μ f, 6000 volts
- C13: 500 μ f, 6000 volts

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← Indicates a change.

FEB. 1, 1950

TUBE DEPARTMENT
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

CE-7358R2A



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BEAM POWER AMPLIFIER

L2: Horizontal Deflecting Yoke, RCA-205D1 (R5 and C9 should be mounted directly on yoke terminals)

L3: Width control, RCA-206R1

R1: 500000 ohms, 0.5 watt

R2: $91 \pm 10\%$ ohms, 2 watts.

Value of R2 must not be less than 80 ohms

R3: 1000 ohms, 0.5 watt

R4: 25000 ohms, 2 watts, wire-wound potentiometer. Value should be sufficient to limit grid-No.2 input of 6AU5-GT to 1.5 watts

R5: 1000 ohms, 0.5 watt

R6: 20000 ohms, 1 watt

R7 R8 R9 R10: 0.5 megohm, 1 watt

L1: Horizontal Linearity Control, RCA-207R1

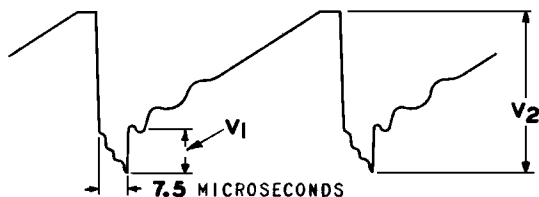
T1: Horizontal-Deflection Output and HV Transformer, RCA-217T1

Table I

Available dc output voltages for kinescopes when 6AU5-GT is operated under conditions shown in tabulated data.

Kinescope Anode Microamps	DC Output Volts for Anode of	
	10BP4	12LP4
0	10000	12000
75	9000	10700

Fig. 1 - Waveform at Grid No.1 of 6AU5-GT in Accompanying Circuit



92CS-7371R1

	10BP4	12LP4	
V1	20	30	volts
V2	90	110	volts

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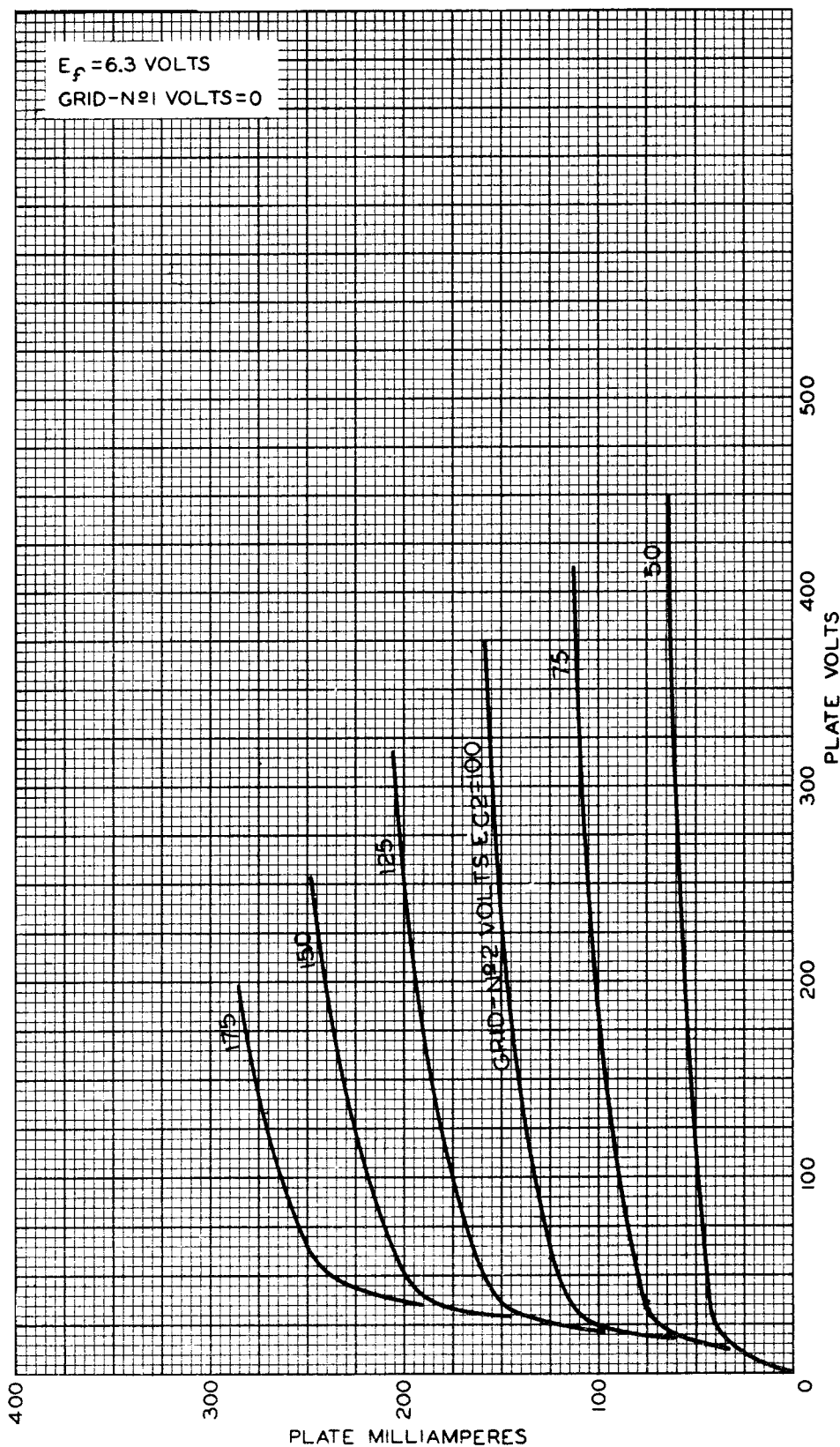
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AVERAGE PLATE CHARACTERISTICS



SEPT. 8, 1949

TUBE DEPARTMENT

RADIO CORPORATION OF AMERICA, HAZELTON, NEW JERSEY

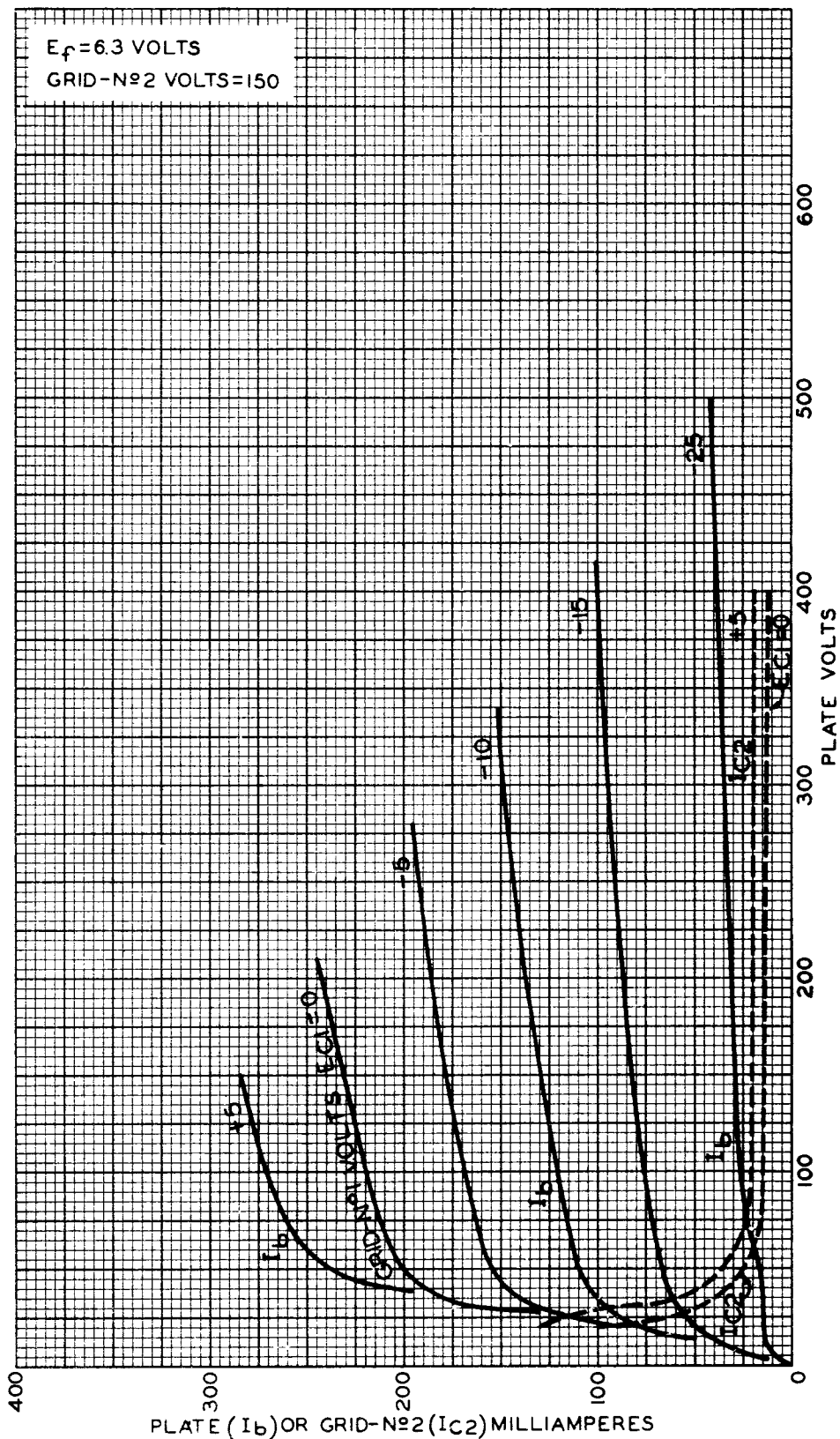
92CM-7355

6AU5-GT



6AU5-GT

AVERAGE PLATE CHARACTERISTICS



AUG. 29, 1949

TUBE DEPARTMENT

92CM-7349

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