



6CS6

PENTAGRID AMPLIFIER

7-PIN MINIATURE TYPE

6CS6

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage	6.3	ac or dc volts
Current	0.3	amp

Direct Interelectrode Capacitances (Approx.):^o

Grid No.1 to plate	0.07 max.	μ f	←
Grid No.3 to plate	0.36 max.	μ f	
Grid No.1 to grid No.3	0.22 max.	μ f	←
Grid No.1 to cathode & grid No.5, grid No.4 & grid No.2, grid No.3, and heater	5.5	μ f	
Grid No.3 to cathode & grid No.5, grid No.4 & grid No.2, grid No.1, and heater	7	μ f	
Plate to cathode & grid No.5, grid No.4 & grid No.2, grid No.3, grid No.1, and heater	7.5	μ f	

Characteristics, Class A₁ Amplifier:

Plate Voltage	100	100	volts
Grid-No.2 & Grid-No.4 Voltage	30	30	volts
Grid-No.3 Voltage	-1	0	volt
Grid-No.1 Voltage	0	-1	volt
Plate Resistance (Approx.)	0.7	1	megohm
Grid-No.3-to-Plate Transconductance	1500	-	μ hos ←
Grid-No.1-to-Plate Transconductance	-	1100	μ hos ←
Plate Current	0.8	1	ma ←
Grid-No.2 & Grid-No.4 Current	5.5	1.3	ma ←
Grid-No.3 Voltage (Approx.) for plate current of 50 μ amp	-2.2	-	volts
Grid-No.1 Voltage (Approx.) for plate current of 50 μ amp	-	-2.5	volts

Mechanical:

Mounting Position Any

Maximum Overall Length 2-1/8"

Maximum Seated Length 1-7/8"

Length, Base Seat to Bulb Top (Excluding tip). 1-1/2" \pm 3/32"

Maximum Diameter 3/4"

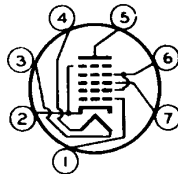
Dimensional Outline See General Section

Bulb T-5-1/2

Base Small-Button Miniature 7-Pin (JETEC No.E7-1)

Basing Designation for BOTTOM VIEW 7CH

Pin 1 - Grid No.1	Pin 5 - Plate
Pin 2 - Cathode, Grid No.5	Pin 6 - Grid No.2, Grid No.4
Pin 3 - Heater	Pin 7 - Grid No.3
Pin 4 - Heater	



^o without external shield.

← Indicates a change.

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GATED AMPLIFIER SERVICE

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE. 300 max. volts
 GRID-No.2 & GRID-No.4 SUPPLY VOLTAGE . . . 300 max. volts
 GRID-No.2 & GRID-No.4 VOLTAGE. . . See *Grid-No.2 Input Rating*
Chart at front of Receiving Tube Section

PLATE DISSIPATION. 1 max. watt
 GRID-No.2 & GRID-No.4 INPUT:

For grid-No.2 & grid-No.4 voltages
 up to 150 volts. 1 max. watt

For grid-No.2 & grid-No.4 voltages
 between 150 and 300 volts. . . See *Grid-No.2 Input Rating*
Chart at front of Receiving Tube Section

CATHODE CURRENT. 14 max. ma

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with
 respect to cathode 200 max. volts

Heater positive with
 respect to cathode 200[▲] max. volts

Typical Operation as Sync Separator and Sync Clipper:

Plate Voltage. 10 volts

Grid-No.2 & Grid-No.4 Voltage. 30 volts

Grid-No.3 Voltage. 0 volts

Grid-No.1 Voltage. 0 volts

→ Plate Current. 2.0 ma

→ Grid-No.2 & Grid-No.4 Current. 4.5 ma

Maximum Circuit Values:

Grid-No.1-Circuit Resistance 0.47 max. megohm

Grid-No.3-Circuit Resistance 2.2 max. megohms

▲ The dc component must not exceed 100 volts.

→ Indicates a change.



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AVERAGE CHARACTERISTICS

$E_f = 6.3$ VOLTS
GRID-N $\#$ 3 VOLTS=0
GRIDS-N $\#$ 2 & N $\#$ 4 VOLTS=30

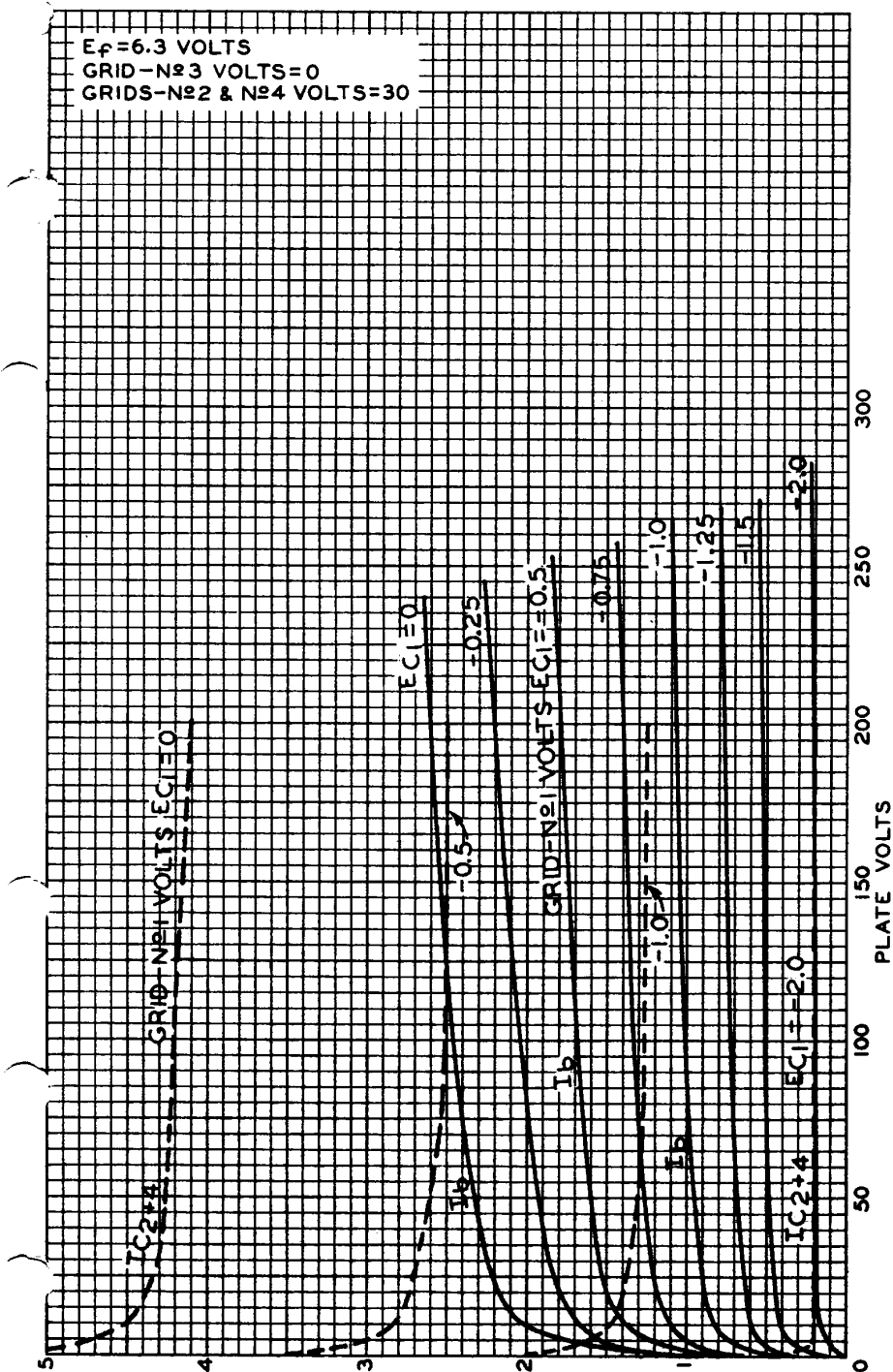


PLATE (I_b) OR GRIDS-N $\#$ 2 & N $\#$ 4 (I_{c2+4}) MILLIAMPERES

TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

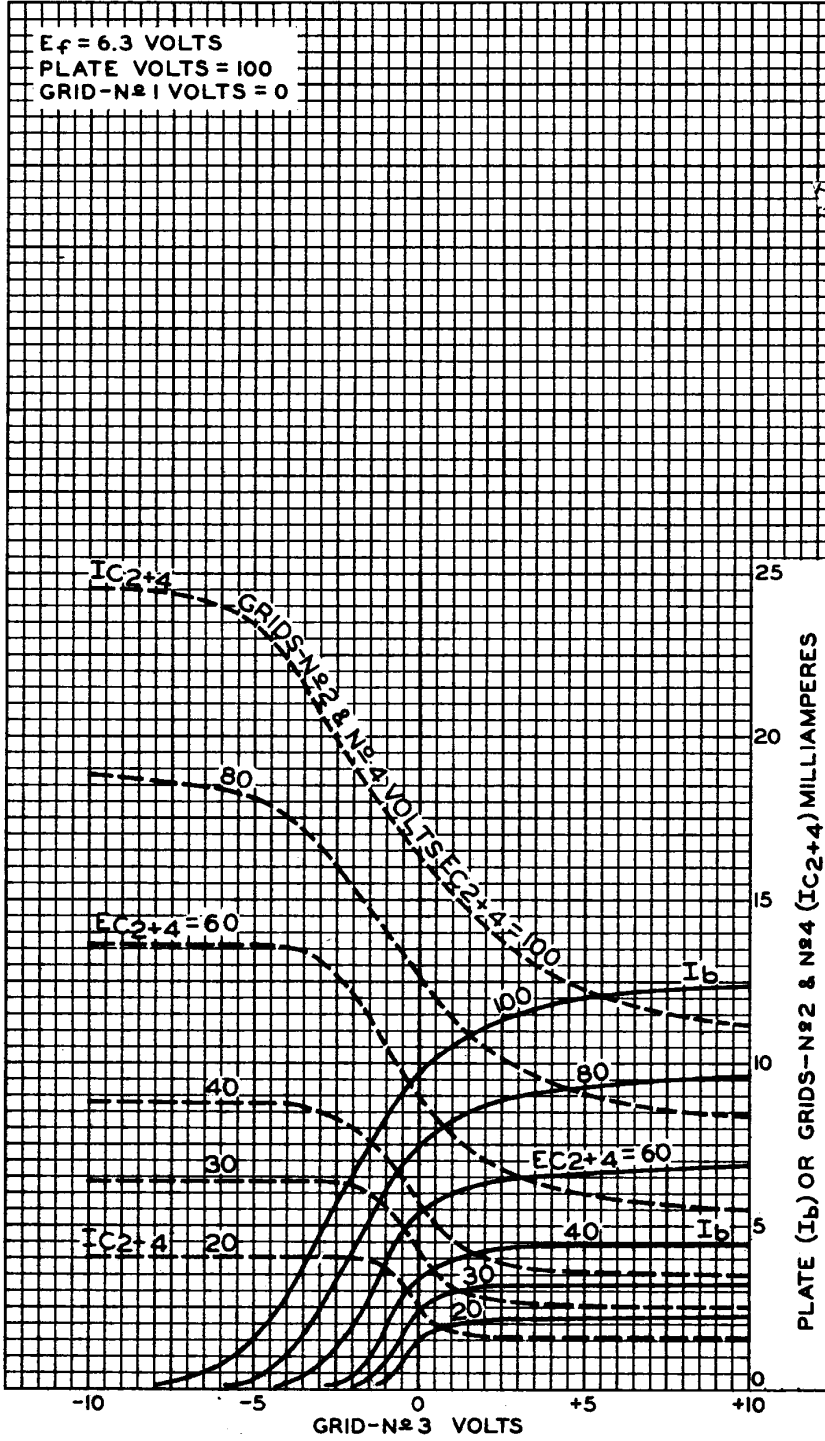
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AVERAGE CHARACTERISTICS



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