

**6AG5****6AG5****SHARP-CUTOFF PENTODE**

MINIATURE TYPE

*Useful at Frequencies up to 400 Mc***GENERAL DATA****Electrical:**

Heater, for Unipotential Cathode:

Voltage.	6.3	ac or dc volts
Current.	0.3	amp

Direct Interelectrode Capacitances:

Without Shield

With Shield^o**Pentode Connection:**

Grid No.1 to plate	0.030 max.	0.020 max.	μf
Grid No.1 to cathode & grid No.3 & internal shield, grid No.2, and heater. .	6.5	6.6	μf
Plate to cathode & grid No.3 & internal shield, grid No.2, and heater . .	1.8	3.1	μf

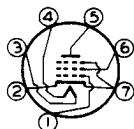
Triode Connection, Grid No.2 tied to Plate:

Grid No.1 to plate and grid No.2.	2.5	2.5	μf
Grid No.1 to cathode & grid No.3 & internal shield, and heater . . .	3.6	3.6	μf
Plate and grid No.2 to cathode & grid No.3 & internal shield, and heater	3	4.3	μf

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"
 Bulb T-5-1/2
 Base Small-Button Miniature 7-Pin (JEDEC No.E7-1)
 Basing Designation for BOTTOM VIEW 7BD

Pin 1 - Grid No.1
 Pin 2 - Cathode,
 Grid No.3,
 Internal
 Shield
 Pin 3 - Heater
 Pin 4 - Heater



Pin 5 - Plate
 Pin 6 - Grid No.2
 Pin 7 - Cathode,
 Grid No.3,
 Internal
 Shield

^o With external shield JEDEC No.316 connected to pin No.7.

—Indicates a change.



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SHARP-CUTOFF PENTODE

AMPLIFIER - Class A₁

Pentode Connection

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300 max.	volts
GRID-No.2 (SCREEN) SUPPLY VOLTAGE.	300 max.	volts
GRID-No.2 VOLTAGE.	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive bias value.	0 max.	volts
PLATE DISSIPATION.	2 max.	watts
GRID-No.2 INPUT:		
For grid-No.2 voltages up to 150 volts	0.5 max.	watt
For grid-No.2 voltages between 150 and 300 volts.	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

Plate Voltage.	100	125	250	volts
Grid-No.2 Voltage.	100	125	150	volts
Cathode-Bias Resistor.	180	100	180	ohms
Plate Resistance (Approx.)	0.6	0.5	0.8	megohm
Transconductance	4500	5100	5000	μmhos
Plate Current.	4.5	7.2	6.5	ma
Grid-No.2 Current.	1.4	2.1	2.0	ma
Grid-No.1 Voltage (Approx.) for plate current = 10 μamp	-5	-6	-8	volts

AMPLIFIER - Class A₁

Triode Connection - Grid No.2 Connected to Plate

Maximum Ratings, Design-Center Values:

PLATE VOLTAGE.	300 max.	volts
GRID-No.1 (CONTROL-GRID) VOLTAGE:		
Positive bias value.	0 max.	volts
PLATE AND GRID-No.2 DISSIPATION (TOTAL).	2.5 max.	watts
PEAK HEATER-CATHODE VOLTAGE:		
Heater negative with respect to cathode	90 max.	volts
Heater positive with respect to cathode	90 max.	volts

Typical Operation and Characteristics:

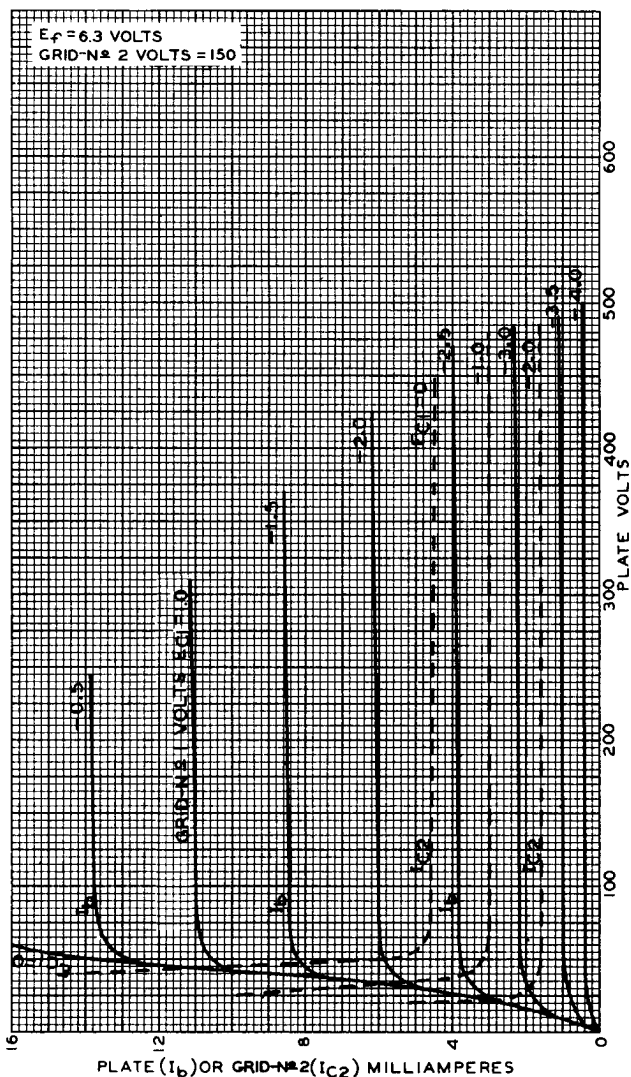
Plate Voltage.	180	250	volts
Cathode-Bias Resistor.	330	820	ohms
Plate Resistance (Approx.)	0.008	0.01	megohm
Amplification Factor	45	42	
Transconductance	5700	3800	μmhos
Plate & Grid-No.2 Current (Total).	7	5.5	ma

→ indicates a change.



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AVERAGE PLATE CHARACTERISTICS



DEC. 27, 1954

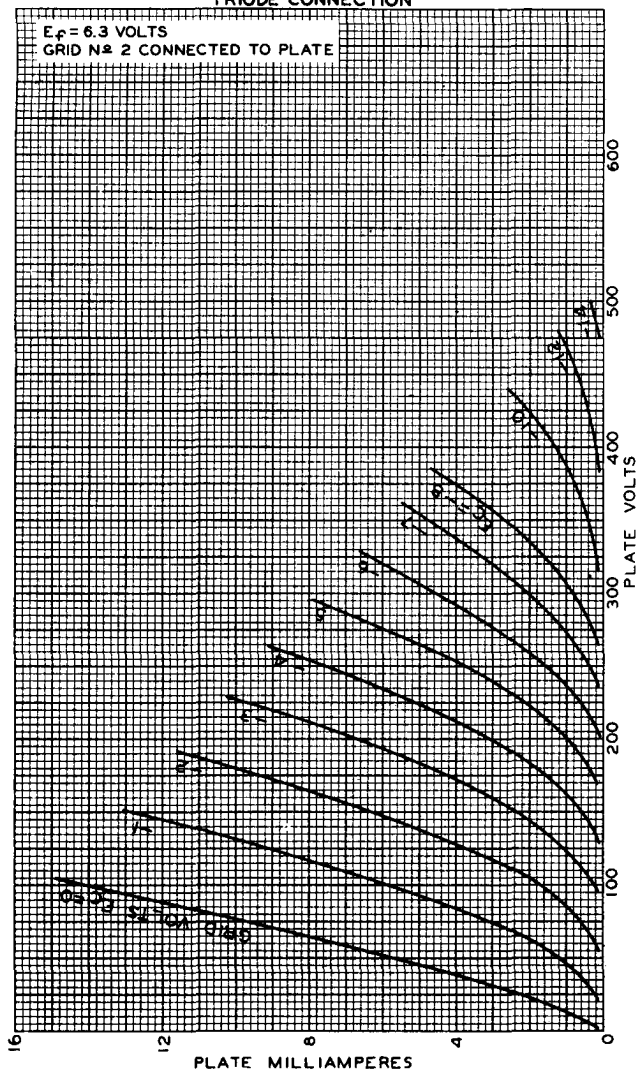
TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6399R2

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6AG5 AVERAGE PLATE CHARACTERISTICS TRIODE CONNECTION

 $E_f = 6.3$ VOLTSGRID N^o 2 CONNECTED TO PLATE

DEC. 28, 1954

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RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM - 6464RI