

## Beam Power Tube

## GENERAL DATA

**Electrical:**

Heater, for Unipotential Cathode:

Voltage (AC or DC) . . . . . 6.3 ± 10% volts  
Current at 6.3 volts. . . . . 1.2 amp

Mu-Factor, Grid No.2 to Grid No.1

for plate volts = 150, grid-No.2

volts = 150, grid-No.1 volts =

-22.5 . . . . . 4.4

Direct Interelectrode Capacitances

(Approx.):<sup>a</sup>

Grid No.1 to plate. . . . . 0.5 μμuf

Grid No.1 to cathode &amp; grid No.3,

grid No.2, and heater . . . . . 17 μμuf

Plate to cathode &amp; grid No.3,

grid No.2, and heater . . . . . 7 .μμuf

**Characteristics, Class A<sub>1</sub> Amplifier:**

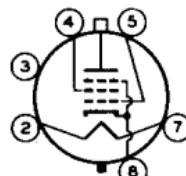
Plate Voltage . . . . .	60	250	volts
Grid-No.2 Voltage . . . . .	150	150	volts
Grid-No.1 Voltage . . . . .	0	-22.5	volts
Plate Resistance (Approx.) . . . . .	-	15000	ohms
Transconductance. . . . .	-	7100	μmhos
Plate Current . . . . .	390 <sup>b</sup>	70	ma
Grid-No.2 Current . . . . .	32 <sup>b</sup>	2.1	ma
Grid-No.1 Voltage (Approx.) for plate ma. = 1 . . . . .	-	-42	volts

**Mechanical:**

Operating Position. . . . .	Any
Maximum Overall Length. . . . .	4-1/4"
Seated Length . . . . .	3-1/2" ± 3/16"
Diameter. . . . .	1.438" to 1.562"
Bulb. . . . .	T12
Cap. . . . .	Skirted Miniature (JEDEC No.C1-3)
Base. . . . .	Short Medium-Shell Octal 6-Pin with External Barriers, Style B, Arrangement 2 (JEDEC No.B6-122)

Basing Designation for BOTTOM VIEW. . . . . 6AM

- Pin 2 - Heater
- Pin 3 - No Connection
- Pin 4 - Grid No.2
- Pin 5 - Grid No.1



- Pin 7 - Heater
- Pin 8 - Cathode, Grid No.3
- Cap - Plate



# 6GW6

## HORIZONTAL-DEFLECTION AMPLIFIER

### Maximum Ratings, Design-Maximum Values:

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

DC PLATE-SUPPLY VOLTAGE . . . . .	770	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE <sup>d</sup> . . . . .	6500	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE . . . . .	1500	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE . . . . .	220	max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE . . . . .	-55	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE . . . . .	330	max.	volts
CATHODE CURRENT:			
Peak. . . . .	550	max.	ma
Average . . . . .	175	max.	ma
GRID-No.2 INPUT . . . . .	3.5	max.	watts
PLATE DISSIPATION <sup>e</sup> . . . . .	17.5	max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode . . . . .	200	max.	volts
Heater positive with respect to cathode . . . . .	200 <sup>f</sup>	max.	volts
BULB TEMPERATURE (At hottest point on bulb surface). . . . .	240	max.	°C

### Maximum Circuit Values:

#### Grid-No.1-Circuit Resistance:

For grid resistor-bias operation. . . . . 1 max. megohm

<sup>a</sup> Without external shield.

<sup>b</sup> This value can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

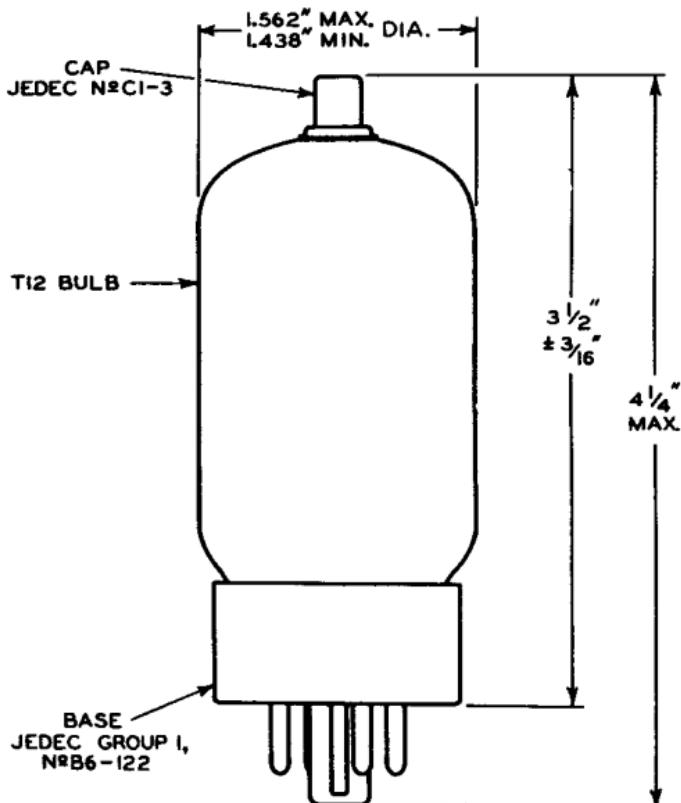
<sup>c</sup> As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

<sup>d</sup> This rating is applicable where the duration of the voltage pulse does 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>e</sup> An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

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





92CS-10820R1



RADIO CORPORATION OF AMERICA  
Electron Tube Division

DATA 2  
3-61

# 6GW6

## AVERAGE CHARACTERISTICS

