



6CB5

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BEAM POWER TUBE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage. 6.3 ac or dc volts

Current. 2.5 amp

Direct Interelectrode Capacitances (Approx.):⁰Grid No.1 to plate 0.8 μf Grid No.1 to cathode & grid No.3,
grid No.2, and heater. 24 μf Plate to cathode & grid No.3,
grid No.2, and heater. 10 μf Characteristics, Class A₁ Amplifier:

Plate Voltage. 75 175 volts

Grid-No.2 (Screen) Voltage 150 175 volts

Grid-No.1 (Control-Grid) Voltage 0 -30 volts

Mu-Factor, Grid No.2 to Grid No.1. - 3.8

Plate Resistance (Approx.) - 5000 ohms

Transconductance - 8800 μmhos

Plate Current. 460* 90 ma

Grid-No.2 Current. 42* 6 ma

Grid-No.1 Voltage (Approx.)
for plate current of 1 ma. - -60 volts

Mechanical:

Mounting Position. Any

Maximum Overall Length 5-1/8"

Seated Length. 4-7/16" $\pm$ 5/32"

Maximum Diameter 2-1/16"

Bulb ST-16

Cap. Small (JETEC No.C1-1)

Base Short Jumbo-Shell Octal 8-Pin with
External Barriers (JETEC No.88-71)

Basing Designation for BOTTOM VIEW 8GD

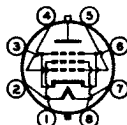
Pin 1 - Grid No.2

Pin 2 - Heater

Pin 3 - Cathode,
Grid No.3

Pin 4 - Grid No.1

Pin 5 - Grid No.1

Pin 6 - Cathode,
Grid No.3

Pin 7 - Heater

Pin 8 - Grid No.2
Cap - Plate⁰ Without external shield.

* These values can be measured by a method involving a recurrent wave form such that the plate dissipation and grid-No.2 input will be kept within ratings in order to prevent damage to the tube.

MAR. 1, 1955

TUBE DIVISION

TENTATIVE DATA

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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HORIZONTAL DEFLECTION AMPLIFIER

Maximum Ratings, Design-Center Values Except as Noted:

For operation in a 525-line, 30-frame system[□]

DC PLATE VOLTAGE	700	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE (Absolute Value)*	6800 [●]	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE.	1500	max.	volts
DC GRID-No.2 (SCREEN) VOLTAGE.	200	max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE.	-50	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE.	200	max.	volts
DC PLATE CURRENT	200	max.	ma
GRID-No.2 INPUT.	3.6	max.	watts
PLATE DISSIPATION†	23	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 on bulb surface).	210	max.	°C

Maximum Circuit Values:

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

□ 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.

▲ The dc component must not exceed 100 volts.

† It is essential that the plate dissipation be limited in the event of loss of grid signal. For this purpose, some protective means such as a cathode resistor of suitable value be employed.

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AVERAGE PLATE CHARACTERISTICS

