



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.):^o

Grid No.1 to plate	0.8	$\mu\mu\text{f}$
Grid No.1 to cathode & grid No.3, grid No.2, and heater.	24	$\mu\mu\text{f}$
Plate to cathode & grid No.3, grid No.2, and heater.	10	$\mu\mu\text{f}$

Characteristics, Class A₁ Amplifier:

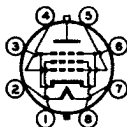
Plate Voltage.	75	175	volts
Grid-No.2 (Screen) Voltage	150	175	volts
Grid-No.1 (Control-Grid) Voltage	0	-30	volts
Mu-Factor, Grid No.2 to Grid No.1.	-	3.8	
Plate Resistance (Approx.)	-	5000	ohms
Transconductance	-	8800	μmhos
Plate Current.	460*	90	ma
Grid-No.2 Current.	42*	6	ma
Grid-No.1 Voltage (Approx.) 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 - Plate

^o 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.

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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.

MAR. 1, 1955

TUBE DIVISION

TENTATIVE DATA

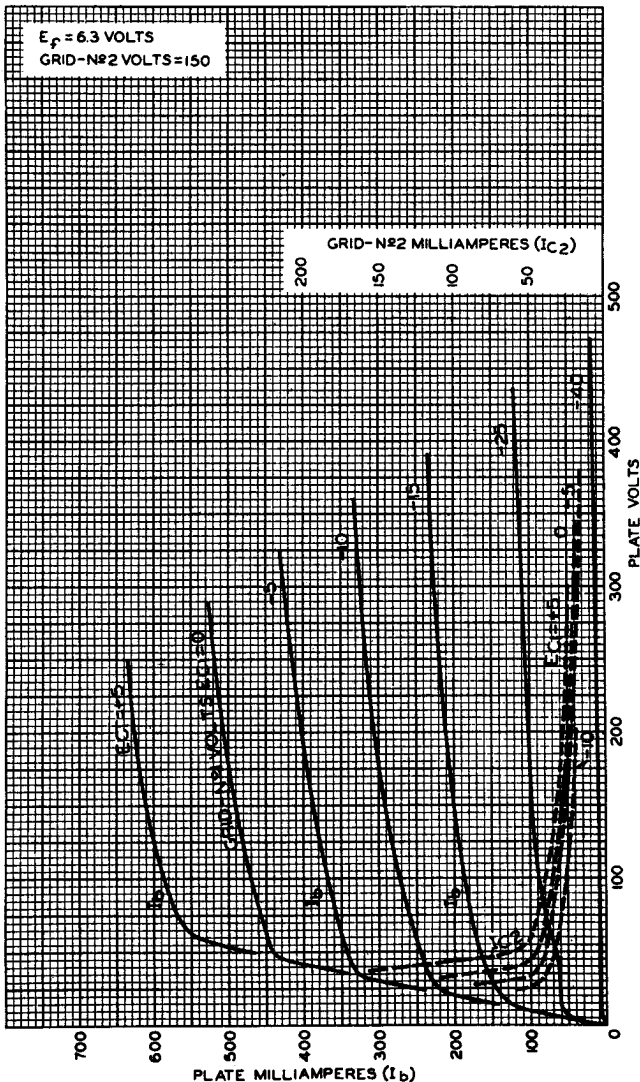
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY



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AVERAGE PLATE CHARACTERISTICS



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