



6CB5-A

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BEAM POWER TUBE

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) 6.3 ± 10% volts

Current 2.5 amp

Direct Interelectrode Capacitances (Approx.):⁰

Grid No.1 to plate. 0.4 μf

Grid No.1 to cathode & grid No.3,
grid No.2, and heater 22 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 Voltage 150 175 volts

Grid-No.1 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 ma. = 1 - -60 volts

Mechanical:

Operating Position. Any

Maximum Overall Length. 5"

Seated Length 4-1/4" ± 3/16"

Maximum Diameter. 1-23/32"

Bulb. T12

Cap Small (JEDEC No.C1-1)

Base. Short Jumbo-Shell Octal 8-Pin
with External Barriers (JEDEC Group 1, No.B8-71),
or Short Medium-Shell Octal 8-Pin

with External Barriers, Style B (JEDEC Group 1, No.B8-118)

Basing Designation for BOTTOM VIEW. 8GD

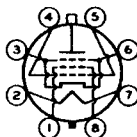
Pin 1-Grid No.2

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

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

DC (Including boost) PLATE VOLTAGE. 880 max. volts

PEAK POSITIVE-PULSE PLATE VOLTAGE*. 6800 max. volts

← Indicates a change.

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PEAK NEGATIVE-PULSE PLATE VOLTAGE . . .	1650	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 . .	220	max.	volts
CATHODE CURRENT:			
Peak	850	max.	ma
DC	240	max.	ma
GRID-No.2 INPUT	4	max.	watts
PLATE DISSIPATION†	26	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).	220	max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid-resistor-bias operation. . . 0.47 max. megohm

○ Without external shield.

* These values can be measured by a method involving a recurrent wave form such that the maximum ratings of the tube will not be exceeded.

□ 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.

† An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

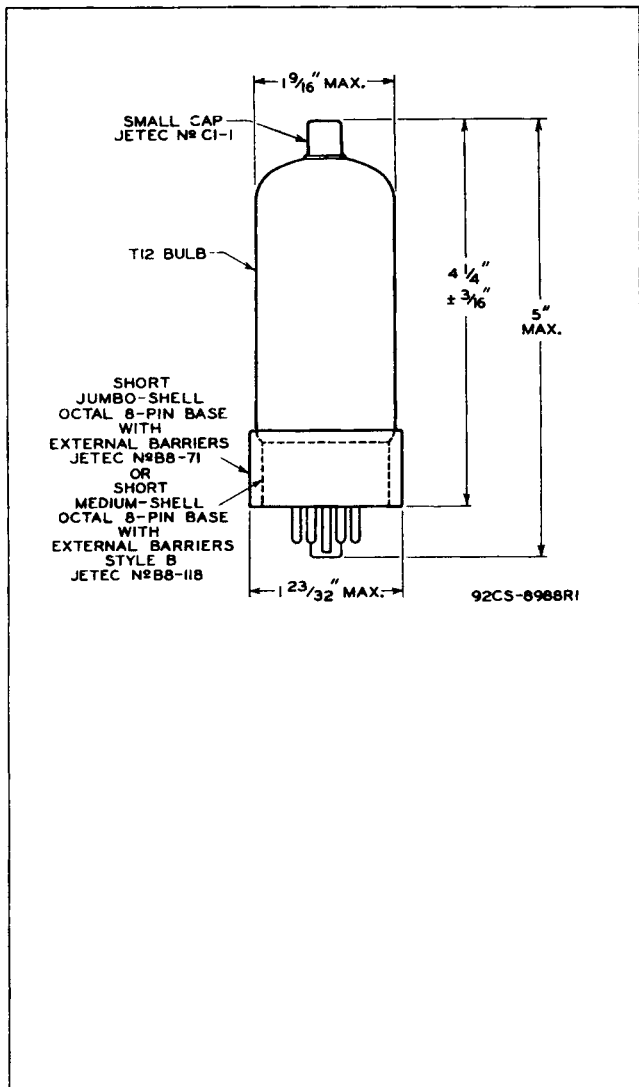
▲ The dc component must not exceed 100 volts.



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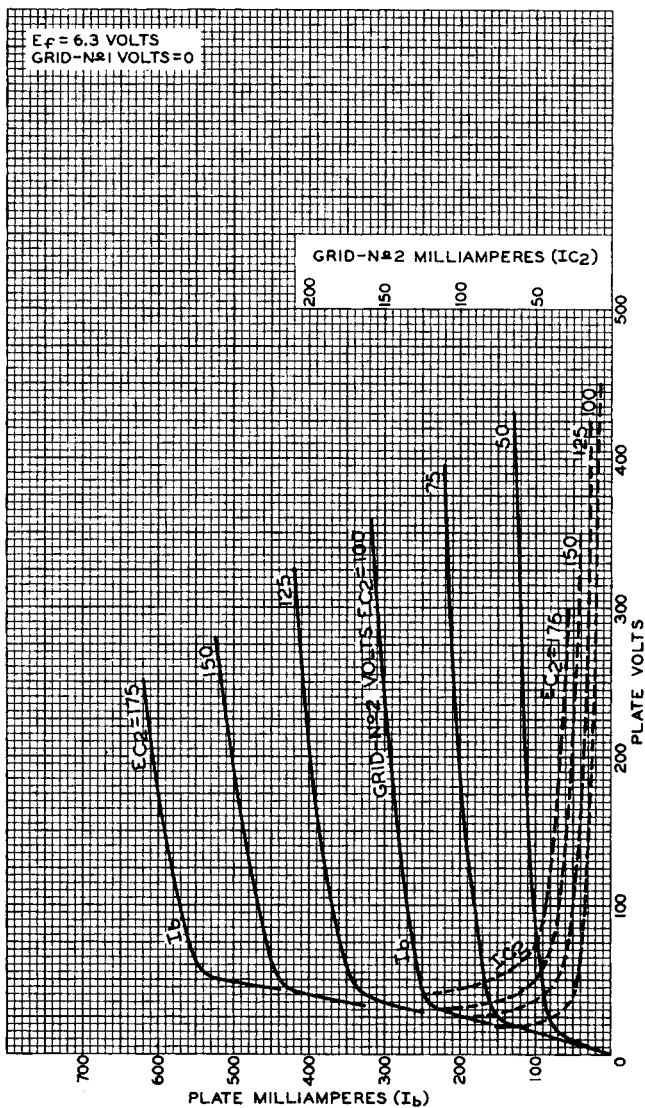


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AVERAGE CHARACTERISTICS





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$E_f = 6.3$ VOLTS
GRID-N^o2 VOLTS = 150

GRID-N^o2 MILLIAMPERES (I_{C2})
200 150 100 50

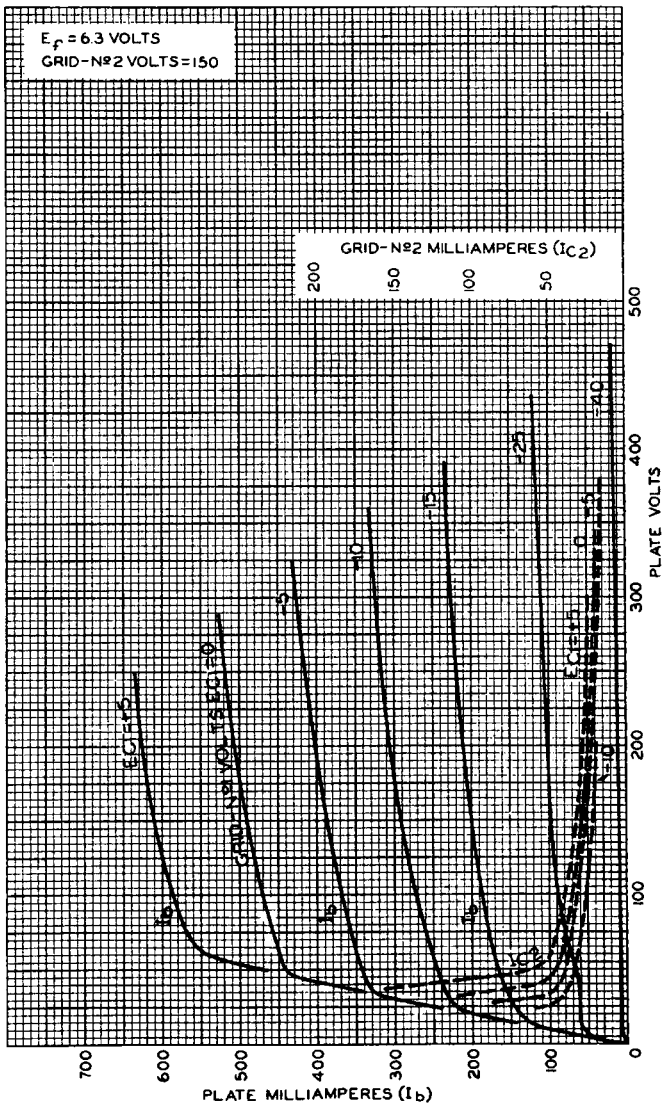


PLATE MILLIAMPERES (I_b)

TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-8436