

Beam Power Tube

GENERAL DATA

Electrical:

Heater Characteristics and Ratings (*Design-Maximum Values*):Voltage (AC or DC) 6.3 ± 0.6 volts

Current at heater volts = 6.3 1.200 amp

Peak heater-cathode voltage:

Heater negative with
respect to cathode. 200 max. voltsHeater positive with
respect to cathode. 200^a max. volts

Direct Interelectrode Capacitances

(Approx.):^bGrid No.1 to plate. 0.5 μf Grid No.1 to cathode & grid No.3,
grid No.2, and heater 15.0 μf Plate to cathode & grid No.3,
grid No.2, and heater 7.0 μf Characteristics, Class A₁ Amplifier:

Plate Voltage 60 150 250 volts

Grid-No.2 Voltage 150 150 150 volts

Grid-No.1 Voltage 0 -22.5 -22.5 volts

Amplification Factor. - 4.4 -

Plate Resistance (Approx.). - - 18000 ohms

Transconductance. - - 7300 μmhos Plate Current 345^c - 65 maGrid-No.2 Current 27^c - 1.8 maGrid-No.1 Voltage (Approx.)
for plate ma. = 1 - - -42 voltsGrid-No.1 Voltage (Approx.)
for peak positive-pulse plate
volts = 5000, grid-No.2 volts
= 150, and plate ma. = 1. - - -100 volts

Mechanical:

Operating Position. Any

Type of Cathode Coated Unipotential

Maximum Overall Length. 3-7/8"

Maximum Seated Length 3-5/16"

Diameter. 1.438" to 1.562"

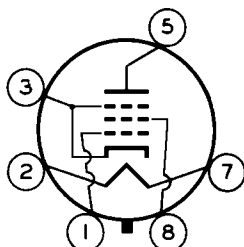
Bulb. T12

Base. Short Medium-Shell Octal 6-Pin
with External Barriers, Arrangement 1, Style A,
(JEDEC Group 1. No.B6-112)

6FW5

Basing Designation for BOTTOM VIEW. 6CK

Pin 1—Grid No.1
Pin 2—Heater
Pin 3—Cathode,
Grid No.3



Pin 5—Plate
Pin 7—Heater
Pin 8—Grid No.2

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

For operation in a 525-line, 30-frame system^d

DC PLATE VOLTAGE.	770 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^e . . .	6500 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE. . .	220 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE . .	330 max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE . .	-55 max.	volts
CATHODE CURRENT:		
Peak.	610 max.	ma
Average	175 max.	ma
GRID-No.2 INPUT	3.6 max.	watts
PLATE DISSIPATION ^f	18 max.	watts
BULB TEMPERATURE (At hottest point on bulb surface).	220 max.	°C

Maximum Circuit Values:

Grid-No.1—Circuit Resistance.	1 max.	megohm
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- ^a The dc component must not exceed 100 volts.
- ^b Without external shield.
- ^c 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.
- ^d As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
- ^e 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.
- ^f An adequate bias resistor or other means is required to protect the tube in the absence of excitation.

