

Beam Power Tube

DUODECAR TYPE

GENERAL DATA

Electrical:

Heater Characteristics and Ratings:

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. volts

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

Direct Interelectrode Capacitances (Approx.):^b

Grid No. 1 to plate 0.34 pf

Grid No.1 to cathode & grid No.3, grid No.2, and heater 16.0 pf

Plate to cathode & grid No.3, grid No.2, and heater 7.0 pf

Characteristics, Class A₁ Amplifier:

Plate Voltage 60 150 250 5000 volts

Grid-No.2 Voltage 150 150 150 150 volts

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

Mu-Factor, Grid No.2 to Grid No.1 - 4.4 - -

Plate Resistance (Approx.) - - 18000 - ohms

Transconductance - - 7300 - μmhos

Plate Current 345^c 65 - ma

Grid-No.2 Current 27^c - 1.8 - ma

Grid-No.1 Voltage (Approx.) for plate ma. = 1. - - -42 -100 volts

Mechanical:

Operating Position Any

Type of Cathode Coated Unipotential

Maximum Overall Length 2.875"

Seated Length 2.250" to 2.500"

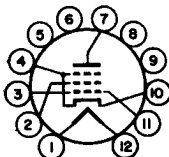
Diameter 1.437" to 1.563"

Bulb T12

Base Large-Button Duodecar 12-Pin (JEDEC No.E12-74)

Basing Designation for BOTTOM VIEW 12BJ

- Pin 1-Heater
- Pin 2-Grid No.2
- Pin 3-Grid No.1
- Pin 4-Cathode, Grid No.3
- Pin 5-Do Not Use^d
- Pin 6-Do Not Use^d



- Pin 7-Plate
- Pin 8-Do Not Use^d
- Pin 9-Do Not Use^d
- Pin 10-Cathode, Grid No.3
- Pin 11-Grid No.1
- Pin 12-Heater



6GE5

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

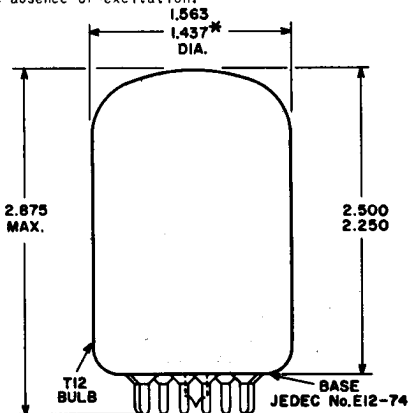
DC PLATE-SUPPLY VOLTAGE	770 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^f	6500 max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE.	220 max.	volts
DC GRID-No.1 (CONTROL-GRID) VOLTAGE	-55 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	330 max.	volts
CATHODE CURRENT:		
Peak.	550 max.	ma
Average	175 max.	ma
GRID-No.2 INPUT	3.5 max.	watts
PLATE DISSIPATION ^g	17.5 max.	watts
BULB TEMPERATURE (At hottest point on bulb surface).	220 max.	°C

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For grid resistor-bias operation. 1 max. megohm

- ^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 Socket terminals 5,6,8, and 9 should not be used as tie points.
- ^e As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.
- ^f 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.
- ^g An adequate bias resistor or other means is required to protect the tube in the absence of excitation.



ALL DIMENSIONS IN INCHES
* APPLIES TO MINIMUM DIAMETER EXCEPT IN THE AREA OF THE SEAL.

