

6DQ6-B

Beam Power Tube

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) 6.3 ± 10% volts
Current at 6.3 volts. 1.2 amp

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

for plate volts = 150, grid-No.2
volts = 150, grid-No.1 volts = -22.5. . . 4.4

Direct Interelectrode Capacitances

(Approx.):^a

Grid No.1 to plate. 0.5 μμf
Grid No.1 to cathode & grid No.3,
grid No.2, and heater 15 μμf
Plate to cathode & grid No.3,
grid No.2, and heater 7 μμf

Characteristics, Class A₁ Amplifier:

Plate Voltage 60 250 volts
Grid-No.2 Voltage 150 150 volts
Grid-No.1 Voltage 0 -22.5 volts
Plate Resistance (Approx.) - 18000 ohms
Transconductance. - 7300 μmhos
Plate Current 345^b 65 ma
Grid-No.2 Current 27^b 1.8 ma
Grid-No.1 Voltage (Approx.) for
grid-No.2 volts = 150, plate ma. = 1,
plate volts =
250 - -42 volts
5000. - -100 volts

Mechanical:

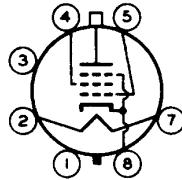
Operating Position. Any
Maximum Overall Length. 4-1/4"
Seated Length 3-1/2" ± 3/16"
Diameter. 1.438" to 1.562"
Bulb. T12
Cap Skirted Miniature (JEDEC No.C1-3)
Base. Short Medium-Shell Octal 7-Pin
with External Barriers, Style A, Arrangement 1
(JEDEC No.B7-111),
Short Medium-Shell Octal 7-Pin
with External Barriers, Style B, Arrangement 1
(JEDEC No.B7-119),
Short Medium-Shell Octal 6-Pin
with External Barriers, Style A, Arrangement 2
(JEDEC No.B6-148), or
Short Medium-Shell Octal 6-Pin
with External Barriers, Style B, Arrangement 2
(JEDEC No.B6-122)



6DQ6-B

Basing Designation for BOTTOM VIEW. 6AM

Pin 1^c-No Connection
 Pin 2-Heater
 Pin 3-No Connection
 Pin 4-Grid No.2



Pin 5-Grid No.1
 Pin 7-Heater
 Pin 8-Cathode,
 Grid No.3
 Cap-Plate

HORIZONTAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

DC PLATE-SUPPLY VOLTAGE	770	max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE ^e	6500	max.	volts
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1500	max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE.	220	max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 VOLTAGE	330	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
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 ^g	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. 1 max. megohm

- ^a without external shield.
- ^b 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.
- ^c On the 6-pin bases, pin 1 as well as pin 6 is omitted.
- ^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.
- ^g The dc component must not exceed 100 volts.



6DQ6-B

