



6DT5

BEAM POWER TUBE

9-PIN MINIATURE TYPE

6DT5

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

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

Direct Interelectrode Capacitances (Approx.):^o

Grid No.1 to plate.	0.57	μmf
Grid No.1 to cathode & grid No.3, grid No.2, and heater	12.5	μmf
Plate to cathode & grid No.3, grid No.2, and heater	4.9	μmf

Characteristics, Class A₁ Amplifier:

Plate Voltage	60	80	250	volts
Grid-No.2 Voltage	150	250	250	volts
Grid-No.1 Voltage	0	0	-16.5	volts
Transconductance.	-	-	6200	μmhos
Plate Current	95*	195*	44	ma
Grid-No.2 Current	8.5	19	1.5	ma
Grid-No.1 Voltage (Approx.) for plate ma. = 100	-	-	-35	volts

Mechanical:

Operating Position.	Any
Maximum Overall Length.	2-5/8"
Maximum Seated Length	2-3/8"
Length, Base Seat to Bulb Top (Excluding tip)	2" ± 3/32"
Diameter.	0.750" to 0.875"
Dimensional Outline	See General Section
Bulb.	T6-1/2
Base.	Small-Button Noval 9-Pin (JEDEC No. E9-1)
Basing Designation for BOTTOM VIEW.	9HN

- Pin 1 - Grid No.2
- Pin 2 - No Connection
- Pin 3 - Grid No.1
- Pin 4 - Heater
- Pin 5 - Heater
- Pin 6 - Grid No.1



- Pin 7 - Cathode, Grid No.3
- Pin 8 - Internal Connection—Do Not Use
- Pin 9 - Plate

VERTICAL-DEFLECTION AMPLIFIER

Maximum Ratings, Design-Maximum Values:

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

DC PLATE VOLTAGE.	315 max.	volts
PEAK POSITIVE-PULSE PLATE VOLTAGE*.	2200 max.	volts
DC GRID-No.2 (SCREEN-GRID) VOLTAGE.	285 max.	volts
PEAK NEGATIVE-PULSE GRID-No.1 (CONTROL-GRID) VOLTAGE.	250 max.	volts

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CATHODE CURRENT:

Peak	190	max.	ma
Average	55	max.	ma
GRID-No.2 INPUT	2	max.	watts
PLATE DISSIPATION	9	max.	watts

PEAK HEATER-CATHODE VOLTAGE:

Heater negative with respect to cathode	200	max.	volts
Heater positive with respect to cathode	200 [▲]	max.	volts

Maximum Circuit Values:

Grid-No.1-Circuit Resistance:

For fixed-bias operation.	0.5	max.	megohm
For cathode-bias operation.	1	max.	megohm

○ Without external shield.

* 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.

□ As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations," Federal Communications Commission.

* This rating is applicable when the duration of the voltage pulse does not exceed 15 per cent of one vertical scanning cycle. In a 525-line, 30-frame system, 15 per cent of one vertical scanning cycle is 2.5 milliseconds.

▲ The dc component must not exceed 100 volts.