6DT5
BEAM POWER TUBE
9-PIN MINIATURE TYPE

GENERAL DATA

Electrical:
Heater, for Unipotential Cathode:
Voltage (AC or DC) .............. 6.3  ± 10% volts
Current ................................ 1.2 amp
Direct Interelectrode Capacitances
(Approx.):°
Grid No. 1 to plate ................ 0.57 μμf
Grid No. 1 to cathode & grid No.3,
grid No. 2, and heater .......... 12.5 μμf
Plate to cathode & grid No.3,
grid No. 2, and heater .......... 4.9 μμf

Characteristics, Class A, 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 μμhos
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

ELECTRON TUBE DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
**Cathode Current:**

<table>
<thead>
<tr>
<th>Type</th>
<th>Value</th>
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<tbody>
<tr>
<td>Peak</td>
<td>190 max. ma</td>
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<tr>
<td>Average</td>
<td>55 max. ma</td>
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</tbody>
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**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

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* 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.