GENERAL DATA

**Electrical:**

Heater, for Unipotential Cathodes:
- **Voltage:** 6.3 ac or dc volts
- **Current:** 2.5 amp

Direct Interelectrode Capacitances (Approx., each unit):
- Grid to plate: 10.5 μμf
- Grid to heater and cathode: 6.8 μμf
- Plate to heater and cathode: 2.3 μμf
- Heater to cathode: 11.0 μμf
- Grid of unit No.1 to grid of unit No.2: 0.70 μμf
- Plate of unit No.1 to plate of unit No.2: 1.65 μμf

**Characteristics, Class A, Amplifier (Each unit):**
- **Plate-Supply Voltage:** 135 volts
- **Cathode-Bias Resistor:** 250 ohms
- **Amplification Factor:** 2
- **Plate Resistance (Approx.):** 280 ohms
- **Transconductance:** 7000 μμhos
- **Plate Current:** 125 ma

**Mechanical:**
- **Mounting Position:** Any
- **Maximum Overall Length:** 5-5/16"
- **Maximum Seated Length:** 4-3/4"
- **Maximum Diameter:** 2-1/16"
- **Bulb:** ST-16
- **Base:** Medium-Shell Octal 8-Pin (JETEC No.B8-11)
- **Basing Designation for BOTTOM VIEW:** 8BD

**Pin Configuration:**
- Pin 1 - Grid of Unit No.2
- Pin 2 - Plate of Unit No.2
- Pin 3 - Cathode of Unit No.2
- Pin 4 - Grid of Unit No.1
- Pin 5 - Plate of Unit No.1
- Pin 6 - Cathode of Unit No.1
- Pin 7 - Heater
- Pin 8 - Heater

**DC AMPLIFIER**

Values are for Each Unit

**Maximum Ratings, Design-Center Values:**
- **PLATE VOLTAGE:** 250 max. volts
- **PLATE CURRENT:** 125 max. ma
- **PLATE DISSIPATION:** 13 max. watts
- **PEAK HEATER-CATHODE VOLTAGE:**
  - Heater negative with respect to cathode: 300 max. volts
  - Heater positive with respect to cathode: 300 max. volts

*Without external shield.*

*Operation with fixed bias is not recommended.*

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MAY 1, 1955

TUBE DIVISION

RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY
LOW-MU TWIN POWER TRIODE

Maximum Circuit Values (For maximum rated conditions):

Grid-Circuit Resistance:
  For cathode-bias operation . . . . . . . 1.0 max. megohm
  For fixed-bias operation . . . . . . . Not recommended

BOOSTER SCANNING SERVICE
Values are for Each Unit

Maximum Ratings, Design-Center Values:

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

PEAK NEGATIVE-PULSE PLATE VOLTAGE* . . . 1700 max. volts
DC PLATE CURRENT . . . . . . . . . . . . 125 max. ma
PLATE DISSIPATION. . . . . . . . . . . . 13 max. watts
PEAK HEATER-CATHODE VOLTAGE:
  Heater negative with respect to cathode . 300 max. volts
  Heater positive with respect to cathode . 300 max. volts

Maximum Circuit Values (For maximum rated conditions):

Grid-Circuit Resistance:
  For cathode-bias operation . . . . . . . 1.0 max. megohm
  For fixed-bias operation . . . . . . . Not recommended

* As described in "Standards of Good Engineering Practice Concerning Television Broadcast Stations", Federal Communications Commission.
  • The duration of the voltage pulse must 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.

MAY 1, 1955
6AS7-G

AVERAGE PLATE CHARACTERISTICS
EACH TRIODE UNIT

E_f = 6.3 VOLTS

RCA VICTOR DIVISION
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

NOV. 6, 1945

92CM-8618