from JETEC release
#2173, May 5, 1958

**GENERAL DATA**

**ADVANCE DATA CHARACTERISTICS**

- **Focusing Method**: Electrostatic
- **Deflection Method**: Magnetic
- **Deflection Angles (Approx.)**
  - Horizontal: 85 Degrees
  - Diagonal: 90 Degrees
- **Phosphor**: Aluminized P4
- **Fluorescence**: White
- **Persistence**: Short to Medium
- **Faceplate**: Gray Filter Glass
- **Light Transmittance (Approx.)**: 77 Percent

**ELECTRICAL DATA**

- **Heater Voltage**: 6.3 Volts
- **Heater Current**: 0.3 ± 5% Ampere
- **Heater Warm-up Time**: 11 Seconds
- **Direct Interelectrode Capacitances (Approx.)**
  - Cathode to All Other Electrodes: 5 μuf
  - Grid No. 1 to All Other Electrodes: 6 μuf
  - External Conductive Coating to Anode: 1500 μuf Max., 1200 μuf Min.

**MECHANICAL DATA**

- **Minimum Useful Screen Dimensions (Maximum Assured)**: 14 ¾ x 11 11/16 Inches
- **Minimum Useful Screen Area**: 155 Sq. Inches
- **Bulb**: J132½C or Equivalent
- **Bulb Contact (Recessed Small Cavity Cap)**: J1-21
- **Base**: B6-63 or B6-20S
- **Basing**: 12L
- **Weight (Approx.)**: 10½ Pounds

**RATINGS**

**MAXIMUM RATINGS (Absolute Maximum Values)**

- **Anode Voltage**: 17,600 Volts dc
- **Grid No. 4 Voltage (Focusing Electrode)**: -550 to +1100 Volts dc
- **Grid No. 2 Voltage**: 550 Volts dc
- **Grid No. 1 Voltage**
  - Negative Bias Value: 155 Volts dc
  - Negative Peak Value: 220 Volts dc
  - Positive Bias Value: 0 Volts dc
  - Positive Peak Value: 2 Volts dc
- **Peak Heater-Cathode Voltage**: 450 Volts
- **Heater Negative with Respect to Cathode During Warm-up Period not to Exceed 15 Seconds**: 450 Volts

**QUICK REFERENCE DATA**

Television Picture Tube
17" Direct Viewed
Rectangular Glass Type
Lightweight Tube
Spherical Faceplate
Gray Filter Glass
Aluminized Screen
Electrostatic Focus
90° Magnetic Deflection
No Ion Trap
External Conductive Coating
6.3 Volt, 300 Ma Heater

Sylvania Electric Products Inc.
Television Picture Tube Division
Seneca Falls, New York
Prepared and Released by the Technical Publications Section
Emporium, Pennsylvania
April 2, 1958
Page 1 of 3
MAXIMUM RATINGS (Absolute Maximum Values) (Cont'd.)

After Equipment Warm-up Period 200 Volts
Heater Positive with Respect to Cathode 200 Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage 14,000 Volts dc
Grid No. 4 Voltage for Focus -50 to +350 Volts dc
Grid No. 2 Voltage 300 Volts dc
Grid No. 1 Voltage Required for Cutoff $^3$ -35 to -72 Volts dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance 1.5 Megohms Max.

NOTES:

1. Heater Warm-up Time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.

2. External conductive coating must be grounded.

3. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.
**DIAGRAM NOTES:**

1. Reference line is determined by the plane C-C' of the reference line gauge (JETEC No. 116) when the gauge is seated against the glass cone.

2. Contact area for external conductive coating, 2" x 2", located 90° counterclockwise from anode contact as viewed from base end of tube.

3. Pin position No. 6 aligns with horizontal centerline of tube within 30° and is on same side as anode contact, J1-21.

**WARNING:**

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.