CHARACTERISTICS

GENERAL DATA
Focusing Method ........................................................... Magnetic
Deflecting Method ........................................................ Magnetic
Deflection Angle (approx.) ............................................. 85 Degrees
   Horizontal .................................................................
   Diagonal ...................................................................... 90 Degrees
Phosphor ................................................................. P4
Fluorescence ........................................................... White
Persistence ............................................................. Medium
Faceplate ............................................................ Gray Filter Glass
Light Transmittance (approx.) ................................. 68 Percent

ELECTRICAL DATA
Heater Voltage .......................................................... 6.3 Volts
Heater Current (approx.) ............................................. 0.6 Ampere
Direct Interelectrode Capacitances (approx.)
   Cathode to all Other Electrodes ................................ 5 \mu F
   Grid No. 1 to All Other Electrodes ......................... 6 \mu F
Ion Trap Magnet ....................................................... External, Single Field Type

MECHANICAL DATA
Minimum Useful Screen Dimensions ................................ 24\frac{1}{4} \times 18\frac{1}{2} \text{ Inches}
Bulb Contact (Recessed Small Cavity Cap) ....................... J1-21
Base (Small Shell Duodecal 5-Pin) .................................. B5-57
Basing ................................................................. 12D

RATINGS
MAXIMUM RATINGS (Design Center Values)
   Anode Voltage .......................................................... 22,500 Volts dc
   Grid No. 2 Voltage .................................................... 500 Volts dc
   Grid No. 1 Voltage ....................................................
      Negative Bias Value ........................................... 125 Volts dc
      Positive Bias Value ............................................. 0 Volts dc
      Positive Peak Value ........................................... 2 Volts
   Peak Heater-Cathode Voltage
      Heater Negative with Respect to Cathode
         During Warm-up Period Not to Exceed 15 Seconds .... 410 Volts
         After Equipment Warm-up Period ...................... 180 Volts
      Heater Positive with Respect to Cathode ................. 180 Volts

RECOMMENDED OPERATING CONDITIONS
   Anode Voltage\(^1\) .................................................. 20,000 Volts dc
   Grid No. 2 Voltage .................................................. 300 Volts dc
   Grid No. 1 Voltage\(^2\) Required for Cutoff ................. 28 to 72 Volts dc
   Focusing Coil Current\(^3\) ........................................ 125 \pm 20\% \text{ Ma dc}
   Ion Trap Magnet Strength (approx.) ......................... 40 Gausses

CIRCUIT VALUES
Grid No. 1 Circuit Resistance ....................................... 1.5 Megohms Max.

NOTES:
1. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than this value.
2. Visual extinction of focused raster. Extinction of the stationary focused spot will require that these values be about 5 volts more negative.
3. For JETEC focusing coil No. 109 or equivalent 3 inches from reference line with the combined grid No. 1 bias voltage and video signal voltage adjusted to produce a highlight brightness of 20 foot lamberts on a picture area of 24\frac{1}{4} \times 18\frac{1}{2} \text{ inches.}
DIAGRAM NOTES:
1. Reference line is determined by the plane C-C1 of the reference line gauge (JETEC No. 116) when the gauge is resting on the cone. The neck diameter near the cone may exceed 1.500" but is limited by the internal contour of the yoke reference line gauge.
2. Suggested mask opening.
3. Bulb contact aligns with vacant pin position No. 6 ± 30 degrees.

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.