Picture Tube

Short Rectangular Glass Type  Aluminized Screen
Low-Voltage Electrostatic Focus  114° Magnetic Deflection
Low Grid-No.2 Voltage  Cathode-Drive Type

With Heater Having Controlled Warm-Up Time

General Data

Electrical:
Heater Current at 6.3 volts .................. 450 ± 10% ma
Heater Warm-Up Time (Average) ............. 11 seconds
Direct Interelectrode Capacitances:
  Grid No.1 to all other electrodes ... 6 µf
  Cathode to all other electrodes ... 5 µf
  External conductive coating to 1900 max. µf
    ultor. .................. 1400 min. µf
Electron Gun. ............. Type Requiring No Ion-Trap Magnet

Optical:
  Faceplate ................................ Filterglass
  Light transmission (Approx.) ......... 78%
  Phosphor (For curves, see front of this Section). P4—Sulfide Type

Mechanical:
  Operating Position. ...................... Any
  Weight (Approx.) ....................... 14 lbs
  Overall Length ......................... 11-3/8" ± 1/4"
  Neck Length .. ......................... 4-1/8" ± 1/8"
  Projected Area of Screen. ............ 172 sq. in.
  External Conductive Coating:
    Type ................................ Regular Band
    Contact area for grounding ............ Near Reference Line

For Additional Information on Coatings and Dimensions:
  See Picture-Tube Dimensional-Outlines and Bulb J149 A sheets
  at the front of this section

Cap .................. Recessed Small Cavity (JEDEC No.J1-21)
Base .................. Special 6-Pin (JEDEC No.B6-214)
Basing Designation for BOTTOM VIEW ........ 7FA

Pin 2 – Cathode
Pin 3 – Heater
Pin 4 – Heater
Pin 5 – Grid No.1
Pin 6 – Grid No.4
Pin 7 – Grid No.2

Cap – Ultor
  (Grid No.3, Grid No.5,
   Collector)
C – External
Conductive
Coating

RADIO CORPORATION OF AMERICA
Electron Tube Division  Harrison, N. J.
Maximum and Minimum Ratings, Design-Maximum Values:

ULTOR-TO-GRID-No.1 VOLTAGE. . . . . . . . . . . . . . . . 19800 max. volts
                   12000 min. volts
GRID-No.4-TO-GRID-No.1 (FOCUSING) VOLTAGE:
   Positive value. . . . . . . . . . . . . . . . . . . . . . 1100 max. volts
   Negative value. . . . . . . . . . . . . . . . . . . . . . 500 max. volts
GRID-No.2-TO-GRID-No.1 VOLTAGE. . . . . . . . . . . . . . 70 max. volts
                   40 min. volts
CATHODE-TO-GRID-No.1 VOLTAGE. . . . . . . . . . . . . . . . 100 max. volts
HEATER VOLTAGE. . . . . . . . . . . . . . . . . . . . . . . . 7 max. volts
                   5.8 min. volts

PEAK HEATER-CATHODE VOLTAGE:
   Heater negative with respect to cathode:
     During equipment warm-up period not exceeding 15 seconds. . 410 max. volts
     After equipment warm-up period. . . 180 max. volts
   Heater positive with respect to cathode. . . . 180 max. volts

Typical Operating Conditions:

With ultor-to-grid-No.1 voltage of 14500 volts
and grid-No.2-to-grid-No.1 voltage of 50 volts
Grid-No.4-to-Grid-No.1 Voltage for focus. . 0 to 500 volts
Cathode-to-Grid-No.1 Voltage for visual extinction of focused raster. . 31 to 49 volts

Maximum Circuit Values:
Grid-No.1-Circuit Resistance. . . . . . . . . . . . . . . . . . . . . 1.5 max. megohms

For X-radiation shielding considerations, see sheet X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES at front of this section