Picture Tube

BI-PANEL RECTANGULAR GLASS TYPE  ALUMINIZED SCREEN
LOW-VOLTAGE ELECTROSTATIC FOCUS  110° MAGNETIC DEFLECTION
LOW-GRID-NO.2 VOLTAGE  CATHODE-DRIVE TYPE

With Heater Having Controlled Warm-Up Time

GENERAL DATA

Electrical:

Direct Interelectrode Capacitances:
   Cathode to all other electrodes ........................................ 5 pf
   Grid No.1 to all other electrodes ....................................... 6 pf
   External conductive coating to anode ................................ 2500 max. pf
   ........................................ 2000 min. pf

Heater Current at 6.3 volts ............................................ 450 ± 25 ma

Heater Warm-Up Time (Average) ........................................... 11 seconds

Electron Gun ......................................................... Type Requiring No Ion-Trap Magnet

Optical:

Phosphor (for curves, see front of this Section). P4—Sulfide Type, Aluminized

Faceplate and Protective Panel ........................................ Filterglass

Light transmission (Approx.) ......................................... 40%

Mechanical:

Weight (Approx.) ..................................................... 32-1/2 lbs

Overall Length ....................................................... 15-7/16" ± 7/16"

Neck Length .......................................................... 5-3/8" ± 3/16"

Projected Area of Screen ............................................. 282 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 J187 A sheets at front of this section

Cap ......................................................... Recessed Small Cavity (JEDEC No.J1-21)

Base ................................................................. JEDEC No.BG-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 - Anode
   (Grid No.3,
   Screen,
   Collector)

C - External
   Conductive Coating
Maximum and Minimum Ratings, Design-Maximum Values:

Unless otherwise specified, voltage values are positive with respect to grid No.1

ANODE VOLTAGE ........................................ 22000 max. volts
                                                   15000 min. volts

GRID-No. 4 (FOCUSING) VOLTAGE:
  Positive value. ..................................... 1100 max. volts
  Negative value. .................................... 550 max. volts

GRID-No. 2 VOLTAGE .................................... 70 max. volts
                                                   44 min. volts

CATHODE VOLTAGE:
  Negative peak value ................................ 2 max. volts
  Negative bias value ................................ 0 max. volts
  Positive bias value ................................ 100 max. volts
  Positive peak value ................................ 150 max. volts

HEATER VOLTAGE ......................................... 6.9 max. volts
                                                   5.7 min. volts

PEAK HEATER-CATHODE VOLTAGE:
Heater negative with respect to cathode:
  During equipment warm-up period not exceeding 15 seconds ....... 450 max. volts
  After equipment warm-up period .......... 200 max. volts
Heater positive with respect to cathode:
  Combined AC and DC voltage ................. 200 max. volts
  DC component ...................................... 100 max. volts

Typical Operating Conditions for Cathode-Drive Service:

Unless otherwise specified, voltage values are positive with respect to grid No.1

Anode Voltage ........................................ 16000 volts
Grid-No. 4 Voltage .................................. 0 to 500 volts
Grid-No. 2 Voltage ................................... 50 volts
Cathode Voltage for visual extinction of focused raster ........... 35 to 50 volts

Maximum Circuit Value:
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