Picture Tube

PAN-O-Ply Type
LOW-VOLTAGE ELECTROSTATIC FOCUS
LOW-GRID-No.2 VOLTAGE
110° MAGNETIC DEFLECTION

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 .... 1700 min—2500 max pF

Heater Current at 6.3 volts .......... 450 ± 20 mA
Heater Warm-Up Time (Average) .......... 11 s

Electron Gun ........... Type Requiring No Ion-Trap Magnet
Focus Lens ............ Unipotential

OPTICAL

Phosphor ............... P4—Sulfide Type, Aluminized

For curves, see front of this section

Faceplate ............. Filterglass

Light transmission at center (approx.) ........ 42%

MECHANICAL

Weight (Approx.) ........... 28 lb
Overall Length ............ 14.125 ± .281 in
Neck Length ................ 4.375 ± .125 in
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 J187K sheets

at front of this section

Cap ................ Recessed Small Cavity (JEDEC No.J1-21)
Base ................. Small-Button Heoeightar 7-Pin,

Arrangement 1, (JEDEC No.87-208)

TERMINAL DIAGRAM (Bottom View)

Pin 1—Heater
Pin 2—Grid No.1
Pin 3—Grid No.2
Pin 4—Grid No.4
Pin 6—Grid No.1
Pin 7—Cathode
Pin 8—Heater

Cap—Anode (Grid No.3,
Grid No.5, Screen,
Collector)
C—External Conductive
Coating

→ Indicates a change.
MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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

Anode Voltage. 12000 min—23500 max V
Grid-No. 4 (Focusing) Voltage
  Positive value 1250 max V
  Negative value 400 max V
Grid-No. 2 Voltage. 20 min—60 max V
Cathode Voltage
  Negative peak value. 2 max V
  Negative bias value. 0 max V
  Positive bias value. 100 max V
  Positive peak value. 150 max V
Heater Voltage. 5.7 min—6.9 max V

Peak Heater-Cathode Voltage
  Heater negative with respect to cathode:
    During equipment warm-up period not exceeding 15 seconds. 450 max V
    After equipment warm-up period 300 max V
  Heater positive with respect to cathode:
    Combined AC and DC voltage 200 max V
    DC component 100 max V

TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE

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

Anode Voltage. 18000 V
Grid-No. 4 Voltage. 200 V
Grid-No. 2 Voltage. 30 V
Cathode Voltage. 22 to 45 V

For visual extinction of focused raster:
  Field Strength of required adjustable centering magnet. 0 to 12 G

MAXIMUM CIRCUIT VALUE
Grid-No. 1—Circuit Resistance. 1.5 max MΩ

a Includes implosion protection hardware.

b The grid-No. 4 voltage required for optimum focus of any individual tube will have a value anywhere between 0 and 400 volts with the combined grid-No. 1 voltage and video-signal voltage adjusted to give an anode current of 200 microamperes on a 13.5-inch by 18-inch pattern from an RCA-2FP21 monoscope, or equivalent.

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