Picture Tube

PAN-O-PLY TYPE
NO ION-TRAP MAGNET REQUIRED
LOW-VOLTAGE ELECTROSTATIC FOCUS
110° MAGNETIC DEFLECTION

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 V ....... 600 ± 30 mA
Heater Warm-Up Time (Average) .... 11 s
Electron Gun. ....... Type Requiring No Ion-Trap Magnet

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 ....... 14.875 ± .281 in
Neck Length ....... 5.125 ± .125 in
Projected Area of Screen ....... 282 sq in

External Conductive Coating
Type (see CTR OUTLINES 1 at front of this section) ....... Regular-Band
Contact area for grounding. ....... Near Reference Line
Cap ....... Recessed Small Cavity (JEDEC No. J1-21)
Base. ....... Small-Button Neonight 7-Pin, Arrangement 1, (JEDEC No. B7-208)

TERMINAL DIAGRAM (BOTTOM VIEW)

MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES
Voltages are positive with respect to cathode

Anode Voltage ....... 11000 min — 23000 max V
Grid-No.4 Voltage
Positive value ....... 1100 max V
Negative value ....... 550 max V
Grid-No.2 Voltage ....... 200 min — 550 max V
Grid-No.1 Voltage
Negative peak value ....... 220 max V
Negative bias value ....... 150 max V
Positive bias value ....... 0 max V
Positive peak value ....... 2 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 ≤ 15 s ..... 450 max V
  After equipment warm-up period ............... 300 max V
Heater positive with respect to cathode:
  Combined AC & DC voltage .................. 200 max V
  DC component ................................ 100 max V

TYPICAL OPERATING CONDITIONS FOR CATHODE-DRIVE SERVICE
Voltages are positive with respect to grid No.1

Anode Voltage .................................. 18000 V
Grid-No.4 Voltage a .................. 200 V
Grid-No.2 Voltage .................. 300 V
Cathode Voltage ........................... 28 to 62 V

For visual extinction of focused raster
Field Strength ................................ 0 to 12 G

Of required adjustable centering magnet

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 13-1/2-inch by 18-inch pattern from an RCA-2F21 monoscope, or equivalent.

DIMENSIONAL OUTLINE
FOR PICTURE TUBE UTILIZING BULB J187K WITH MOUNTING LUGS

MINIMUM SCREEN
DIAGONAL 22.312
GREATEST WIDTH 19.250
GREATEST HEIGHT 15.125

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DIMENSIONS IN INCHES