

Picture Tube

PAN-0-PLY — INTEGRAL IMPLOSION PROTECTION

(Provided by Formed Rim and Welded Tension Bands around Periphery of Tube Panel—No Separate Safety-Glass or Integral Protective Window Required)

RECTANGULAR GLASS TYPE ALUMINIZED SCREEN
 LOW-VOLTAGE ELECTROSTATIC FOCUS 110° MAGNETIC DEFLECTION
 NO ION-TRAP MAGNET REQUIRED

Low-Grid-No.2-Voltage—for Cathode-Drive Operation

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 ^a | { 2500 max. 1700 min. | pf |
| | | pf |

Heater Current at 6.3 volts. 450 ± 20 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. Filterglass

Light transmission at center (Approx.) 42%

Mechanical:

Weight (Approx.) 28 lbs

Overall Length 14.875" ± .281"

Neck Length. 5.125" ± .125"

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, Dimensions, and Deflection Angles:

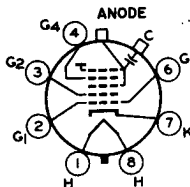
See *Picture-Tube Dimensional-Outlines and Bulb J187 K* sheets at the front of this section.

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

Base. Small-Button Neoeightar 7-Pin, Arrangement 1, (JEDEC No.B7-208)

Basing Designation for BOTTOM VIEW. 8HR

- 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



23FDP4

Maximum and Minimum Ratings, Design-Maximum Values:

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

| | | |
|--------------------------------------------------------------------|----------------------------|----------------|
| Anode Voltage. | { 23000 max. 11000 min. | volts volts |
| Grid-No.4 Voltage: | | |
| Positive value | 1250 max. | volts |
| Negative value | 400 max. | volts |
| Grid-No.2 Voltage. | { 70 max. 40 min. | volts 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. 5.7 min. | volts 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 | 300 max. | volts |
| Heater positive with respect to cathode: | | |
| Combined AC & 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. | 18000 | volts |
| Grid-No.4 Voltage ^b | 200 | volts |
| Grid-No.2 Voltage. | 50 | volts |
| Cathode Voltage for visual extinction of focused raster | 34 to 52 | volts |
| Field Strength of required adjustable Centering Magnet. | 0 to 12 | gauss |

Maximum Circuit Value:

| | | |
|----------------------------------------|----------|---------|
| Grid-No.1 Circuit Resistance | 1.5 max. | megohms |
|----------------------------------------|----------|---------|

^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.

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

