

23FP4A

Picture Tube

SHORT RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC FOCUS

ALUMINIZED SCREEN
114° MAGNETIC DEFLECTION

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. | $\left\{ \begin{array}{l} 2500 \text{ max.} \\ 1700 \text{ min.} \end{array} \right.$ | pf |
| | | pf |

Heater Current at 6.3 volts 600 ± 60 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 (Approx.). 78%

Mechanical:

Weight (Approx.). 24 lbs

Overall Length. 13-11/16" + 5/16" - 1/4"

Neck Length 4-3/8" ± 1/8"

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:

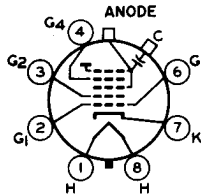
See *Picture-Tube Dimensional-Outlines and Bulb J187 B* sheets at front of this section

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



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Maximum and Minimum Ratings, Design-Maximum Values:

Unless otherwise specified, voltage values are positive with respect to cathode

| | | |
|---|--------------|-------|
| ANODE VOLTAGE | { 23500 max. | volts |
| | { 11000 min. | volts |
| GRID-No.4 (FOCUSING) VOLTAGE: | | |
| Positive value | 1100 max. | volts |
| Negative value | 550 max. | volts |
| GRID-No.2 VOLTAGE | { 550 max. | volts |
| | { 200 min. | volts |
| GRID-No.1 VOLTAGE: | | |
| Negative peak value | 200 max. | volts |
| Negative bias value | 154 max. | volts |
| Positive bias value | 0 max. | volts |
| Positive peak value | 2 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 Grid-Drive Service:

Unless otherwise specified, voltage values are positive with respect to cathode

| | | |
|---|-------------|-------|
| Anode Voltage | 14000 | volts |
| Grid-No.4 Voltage | 0 to 400 | volts |
| Grid-No.2 Voltage | 450 | volts |
| Grid-No.1 Voltage for visual extinction of focused raster | -45 to -105 | 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