

## Picture Tube

**NO ION-TRAP MAGNET REQUIRED**

**RECTANGULAR GLASS TYPE  
LOW-VOLTAGE ELECTROSTATIC FOCUS**

**ALUMINIZED SCREEN  
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 . . . . . | {2500 max.<br>1700 min. | pf |

Heater Current at 6.3 volts. . . . . 600 ± 30 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.) . . . . . 74%

### Mechanical:

Weight (Approx.) . . . . . 26-1/2 lbs

Overall Length . . . . . 14.812" ± .312"

Neck Length. . . . . 4.375" ± .125"

Projected Area of Screen . . . . . 332 sq. in.

External Conductive Coating:

Type . . . . . Modified-Band

Contact area for grounding . . . . . Near Reference Line

For Additional Information on Coatings and Dimensions:

See *Picture-Tube Dimensional-Outlines and Bulb J192 C/D*  
sheets at front of this section.

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

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

Basing Designation for BOTTOM VIEW . . . . . 8KW

Pin 1—Heater

Pin 3—Grid No.1

Pin 4—Grid No.4

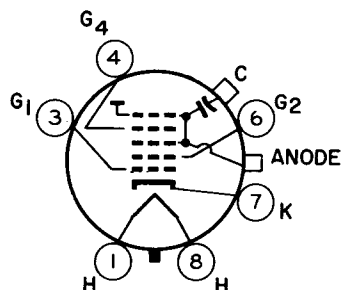
Pin 6—Grid No.2

Pin 7—Cathode

Pin 8—Heater

Cap—Anode (Grid No.3,  
Grid No.5, Screen,  
Collector)

C—External Conductive  
Coating



### Maximum and Minimum Ratings, Design-Maximum Values:

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

Anode Voltage. . . . . 20000 max. volts

Grid-No.4 (Focusing) Voltage:

Positive value . . . . . 1100 max. volts

Negative value . . . . . 550 max. volts



# 24BEP4

|                                             |                        |       |
|---------------------------------------------|------------------------|-------|
| Grid-No.2 Voltage. . . . .                  | 550 max.               | volts |
| Grid-No.1 Voltage:                          |                        |       |
| Negative peak value. . . . .                | 220 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.<br>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 . . . . .    | 200 max.               | volts |
| Heater positive with respect to cathode . . | 200 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. . . . . | 200      | volts |
| Grid-No.2 Voltage. . . . . | 400      | volts |
| Cathode Voltage for        |          |       |
| visual extinction of       |          |       |
| focused raster . . . . .   | 42 to 78 | volts |

**Maximum Circuit Value:**

|                                                      |          |         |
|------------------------------------------------------|----------|---------|
| Grid-No.1 Circuit Resistance . . . . .               | 1.5 max. | megohms |
| For X-radiation shielding considerations, see sheet  |          |         |
| <b>X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES</b> |          |         |
| At front of this section                             |          |         |