

# 24BEP4

## 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 . . . . .	$\left\{ \begin{array}{l} 2500 \text{ max.} \\ 1700 \text{ min.} \end{array} \right.$	pf
		600 $\pm$ 30
Heater Current at 6.3 volts. . . . .	11	seconds
Heater Warm-up Time (Average). . . . .		
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" $\pm$ .312"
Neck Length. . . . .	4.375" $\pm$ .125"
Projected Area of Screen . . . . .	332 sq. in.

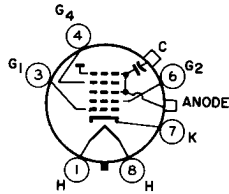
External Conductive Coating:

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 Neoeightar 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



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

