

# 14CP4B

## Picture Tube

### MAGNETIC FOCUS

### 70° 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. . . . . | { 2000 max<br>750 min | pF |
|                                               |                       | pF |

Heater Current at 6.3 volts . . . . . 600 ± 30 mA

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 (Approx.) . . . . . 76%

### MECHANICAL

Weight (Approx.) . . . . . 10.5 lbs

Overall Length. . . . . 16.469 ± 0.375 in

Neck Length . . . . . 7.188 ± 0.188 in

Projected Area of Screen. . . . . 96 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 J109-1/2 A/C* sheets at front of this section

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

Base. . . . . Small-Shell Duodecal 5-Pin (JEDEC Group 4, No. B5-57)

Basing Designation for BOTTOM VIEW. . . . . 12N

Pin 1—Heater

Pin 2—Grid No.1

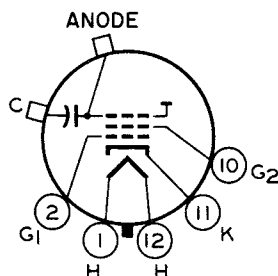
Pin 10—Grid No.2

Pin 11—Cathode

Pin 12—Heater

Cap—Anode (Grid No.3,  
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 . . . . . 15500 max V

Grid-No.2 Voltage . . . . . 450 max V

#### Grid-No.1 Voltage

Negative bias value . . . . . 140 max V

Positive bias value . . . . . 0 max V

Positive peak value . . . . . 2 max V



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Heater Voltage. . . . . { 6.9 max V  
5.7 min V

**Peak Heater-Cathode Voltage**

Heater negative with respect to cathode:  
During equipment warm-up period  
not exceeding 15 seconds. . . . . 450 max V  
After equipment warm-up period. . . . . 165 max V  
Heater positive with respect to cathode:  
Combined AC and DC voltage. . . . . 165 max V

**TYPICAL OPERATING CONDITIONS FOR GRID-DRIVE SERVICE**

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

Anode Voltage . . . . . 12000 V  
Grid-No.2 Voltage . . . . . 300 V  
Grid-No.1 Voltage for visual extinction  
of focused raster . . . . . -28 to -72 V

**MAXIMUM CIRCUIT VALUE**

Grid-No.1-Circuit Resistance. . . . . 1.5 max MΩ

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

