

## Picture Tube

LOW-VOLTAGE ELECTROSTATIC FOCUS      70° MAGNETIC DEFLECTION  
NO ION-TRAP MAGNET REQUIRED

### 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 2000 min	pF pF

Heater Current at 6.3 V . . . . . 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.) . . . . . 73%

### MECHANICAL

Weight (Approx.) . . . . . .24 lb  
Overall Length . . . . . 22.438 ± 0.375 in  
Neck Length. . . . . 7.500 ± 0.188 in  
Projected Area of Screen . . . . . 224 sq in  
External Conductive Coating

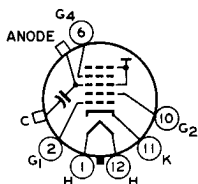
type . . . . . Regular-Band  
Contact area for grounding . . . . . Near Reference Line

#### For Additional Information on Coatings and Dimensions

See *Picture-Tube Dimensional-Outlines* and *Bulb J165 Z* sheets at front of this section

Cap. . . . . Recessed Small Cavity (JEDEC No. J1-21)  
Base . . . . . Small-Shell Duodecal 6-Pin (JEDEC Group 4, No. B6-63)  
Basing Designation for BOTTOM VIEW . . . . . 12L

- Pin 1—Heater
- Pin 2—Grid No.1
- Pin 6—Grid No.4
- Pin 10—Grid No.2
- Pin 11—Cathode
- Pin 12—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	V
Grid-No.4 (Focusing) Voltage		
Positive value . . . . .	1100 max	V
Negative value . . . . .	550 max	V



# 21XP4B

Grid-No.2 Voltage. . . . .	550 max	V
Grid-No.1 Voltage		
Negative peak value. . . . .	220 max	V
Negative bias value. . . . .	155 max	V
Positive bias value. . . . .	0 max	V
Positive peak value. . . . .	2 max	V
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 . . . . .	200 max	V
Heater positive with respect to cathode:		
Combined AC and DC voltage . . . . .	200 max	V
DC Component . . . . .	100 max	V

## TYPICAL OPERATING CONDITIONS FOR GRID-DRIVE SERVICE

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

Anode Voltage. . . . .	16000	V
Grid-No.4 Voltage. . . . .	-64 to 352	V
Grid-No.2 Voltage. . . . .	300	V
Grid-No.1 Voltage. . . . .	-28 to -72	V

For visual extinction of focused raster

## MAXIMUM CIRCUIT VALUE

Grid-No.1-Circuit Resistance . . . . .	1.5 max	MΩ
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For X-radiation shielding considerations, see sheet  
*X-RADIATION PRECAUTIONS FOR CATHODE-RAY TUBES*  
at front of this section

