

## Picture Tube

**RECTANGULAR GLASS TYPE  
MAGNETIC FOCUS**

**ALUMINIZED SCREEN  
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. . . . .	{ 750 max.	pf
	{ 500 min.	pf
Heater Current at 6.3 volts . . . . .	600 ± 60	ma
Electron Gun. . . . .	Type Requiring	No Ion-Trap Magnet

### Optical:

Phosphor (For curves, see front of this section). P4—Sulfide Type, Aluminized  
Faceplate, Spherical. . . . . Filterglass  
Light transmission (Approx.). . . . . 75%

### Mechanical:

Weight (Approx.). . . . . 24 lbs  
Overall Length. . . . . 23-1/32" ± 3/8"  
Neck Length . . . . . 7-1/2" ± 3/16"  
Projected Area of Screen. . . . . 248 sq. in.

External Conductive Coating:

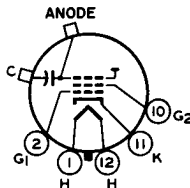
Type. . . . . Regular-Band  
Contact area for grounding. . . . . Near Reference Line  
For Additional Information on Coatings and Dimensions:

See *Picture-Tube Dimensional-Outlines and Bulb J170 B/D* 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 . . . . .	20000 max.	volts
GRID-NO.2 VOLTAGE . . . . .	550 max.	volts



# 21ZP4C

## GRID-No.1 VOLTAGE:

Negative peak value . . . . .	220 max.	volts
Negative bias value . . . . .	155 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 . . . . .	16000	volts
Grid-No.2 Voltage . . . . .	300	volts
Grid-No.1 Voltage for visual extinction of focused raster. . . . .	-28 to -72	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

