

## 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 . . . . .	{ 1500 max. 750 min.	pf
		pf
Heater Current at 6.3 volts. . . . .	600 ± 60	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.) . . . . .	19 lbs
Overall Length . . . . .	19-3/16" ± 3/8"
Neck Length. . . . .	7-1/2" ± 3/16"
Projected Area of Screen . . . . .	149 sq. in.

External Conductive Coating:

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

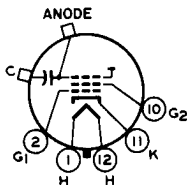
For Additional Information on Coatings, Dimensions, and Deflection Angles:

See *Picture-Tube Dimensional-Outlines and Bulb J133 C/E* 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



# 17QP4B

## 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 . . . . .	14000	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

