

Picture Tube

RECTANGULAR GLASS TYPE
LOW-VOLTAGE ELECTROSTATIC 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. 500 min.	pf	
Heater Current at 6.3 volts		600 ± 60	ma
Electron Gun.		Type Requiring No Ion-Trap Magnet	

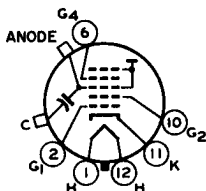
Optical:

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 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. volts



21YP4B

GRID-No.4 (FOCUSING) VOLTAGE:

Positive value. 1100 max. volts
Negative value. 550 max. volts

GRID-No.2 VOLTAGE 550 max. volts

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.4 Voltage -64 to +350 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

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

