

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.	$\begin{cases} 2500 \text{ max} \\ 2000 \text{ min} \end{cases}$	$\begin{cases} \text{pF} \\ \text{pF} \end{cases}$

Heater Current at 6.3 V 600 $\pm$ 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 $\pm$ 0.375 in

Neck Length. 7.500 $\pm$ 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

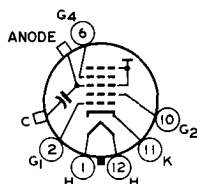
Pin 10—Grid No.2

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



RADIO CORPORATION OF AMERICA
Electronic Components and Devices
Harrison, N. J.

DATA
10-65

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

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

