

21WP4B

Picture Tube

NO ION-TRAP MAGNET REQUIRED

MAGNETIC FOCUS

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 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

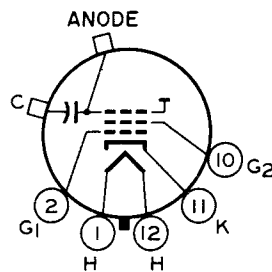
See *Picture-Tube Dimensional-Outlines* and *Bulb J165 Z* sheets
at front of this section

Cap. Recessed Small Cavity (JEDEC No. J1-21)

Base Small-Shell Duodecal 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 V

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



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

DATA
10-65

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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.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

