

Picture Tube

NO ION-TRAP MAGNET REQUIRED

RECTANGULAR GLASS TYPE
MAGNETIC FOCUSALUMINIZED SCREEN
72° 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.	{ 2500 max. 2000 min.	pf

Heater Current at 6.3 volts. 600 ± 30 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, Spherical Filterglass

Light transmission (Approx.) 74%

Surface of Protective Window Treated to reduce
specular reflection**Mechanical:**

Weight (Approx.) 24 lbs

Overall Length 23.031" ± .375"

Neck Length. 7.500" ± .188"

Projected Area of Screen 262 sq.in.

External Conductive Coating:

Type Regular-Band

Contact area for grounding. Near Reference Line

For Additional Information on Coatings and Dimensions:

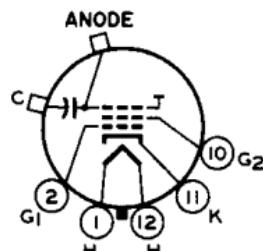
See Picture-Tube Dimensional-Outlines and Bulb J171 B/F sheets
at front of this section

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

Base . . . Small-Shell Duodecal 5-Pin (JEDEC Group 4, No.85-57)

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



21AWP4A

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. 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 Cathode-Drive Service:

Unless otherwise specified, voltage values are positive with respect to grid No. 1

Anode Voltage.	18000	volts
Grid-No.2 Voltage.	400	volts
Cathode Voltage for visual extinction of focused raster.	36 to 78	volts

Maximum Circuit Values:

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