

Picture Tube

PAN-0-PLY — INTEGRAL IMPLOSION PROTECTION

(Provided by Formed Rim and Welded Tension Bands around Periphery of Tube Panel—No Separate Safety-Glass or Integral Protective Window Required)

RECTANGULAR GLASS TYPE **ALUMINIZED SCREEN**
LOW-VOLTAGE ELECTROSTATIC FOCUS **92° MAGNETIC DEFLECTION**
NO ION-TRAP MAGNET REQUIRED

Low-Grid-No.2-Voltage—for Cathode-Drive Operation

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 ^a	$\begin{cases} 2500 \text{ max.} \\ 1700 \text{ min.} \end{cases}$	$\begin{matrix} \text{pf} \\ \text{pf} \end{matrix}$

Heater Current at 6.3 volts. 600 $\pm$ 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 Filterglass

Light transmission at center (Approx.). 42%

Mechanical:

Weight (Approx.). 29 lbs

Overall Length. 18.125" $\pm$.375"

Neck Length 5.625" $\pm$.125"

Projected Area of Screen. 282 sq. in.

External Conductive Coating:

Type. Regular-Band

Contact area for grounding. Near Reference Line

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

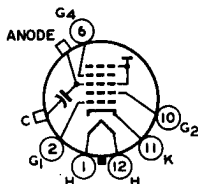
See *Picture-Tube Dimensional-Outlines and Bulb J187 J* sheets at the front of this section.

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

Base. Short Small-Shell Duodecal 6-Pin,
 (JEDEC Group 4, No. B6-203)

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



23ENP4

Maximum and Minimum Ratings, Design-Maximum Values:

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

Anode Voltage.	{25000 max. 11000 min.	volts volts
Grid-No.4 Voltage:		
Positive value	1250 max.	volts
Negative value	400 max.	volts
Grid-No.2 Voltage.	{70 max. 40 min.	volts volts
Cathode Voltage:		
Negative peak value.	2 max.	volts
Negative bias value.	0 max.	volts
Positive bias value.	100 max.	volts
Positive peak value.	150 max.	volts
Heater Voltage	{6.9 max. 5.7 min.	volts 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	300 max.	volts
Heater positive with respect to cathode:		
Combined AC & 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.	20000	volts
Grid-No.4 Voltage ^b	200	volts
Grid-No.2 Voltage.	50	volts
Cathode Voltage for visual		
extinction of focused raster	36 to 54	volts
Field Strength of required		
adjustable Centering Magnet.	0 to 12	gauss

Maximum Circuit Value:

Grid-No.1 Circuit Resistance	1.5 max.	megohms
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^a Includes implosion protection hardware.

^b The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between 0 and +400 volts with the combined grid-No.1 voltage and video-signal voltage adjusted to give an anode current of 200 microamperes on a 13-1/2-inch by 18-inch pattern from an RCA-2F21 monoscope, or equivalent.

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

