

Picture Tube

PAN-O-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

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 { 2500 max. pf
1700 min. pf

Heater Current at 6.3 volts. 450 ± 20 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 18.000" ± .375"

Neck Length. 5.500" ± .188"

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

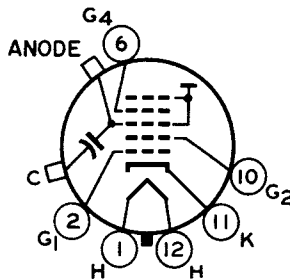
Pin 2—Grid No.1

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



23EKP4

Maximum and Minimum Ratings, Design-Maximum Values:

*Unless otherwise specified, voltage values
are positive with respect to cathode*

Anode Voltage.	{25000 max.	volts
	{11000 min.	volts
Grid-No.4 Voltage:		
Positive value	1100 max.	volts
Negative value	550 max.	volts
Grid-No.2 Voltage.	{550 max.	volts
	{200 min.	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	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.	400	volts
Cathode Voltage for visual		
extinction of focused raster	36 to 78	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 on this Section