

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. 1700 min.	pf
		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	

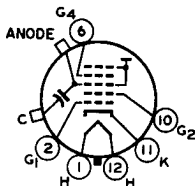
Optical:

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



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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

