

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)

LOW-VOLTAGE ELECTROSTATIC FOCUS 114° 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	$\begin{cases} 1750 \text{ max} \\ 1250 \text{ min} \end{cases}$	$\begin{matrix} \text{pF} \leftarrow \\ \text{pF} \leftarrow \end{matrix}$
Heater Current at 6.3 volts	600 $\pm$ 30	mA
Heater Warm-Up Time (Average)	11	s
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.).	48% $\leftarrow$

MECHANICAL

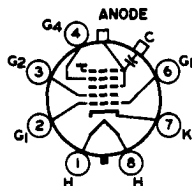
Weight (Approx.).	15.5 lbs $\leftarrow$
Overall Length.	11.625 $\pm$ 0.250 in
Neck Length	4.375 $\pm$ 0.125 in
Projected Area of Screen.	172 sq in
External Conductive Coating ^a	

Type.	Regular-Band
Contact area for grounding.	Near Reference Line
For Additional Information on Coatings and Dimensions	
See <i>Picture-Tube Dimensional-Outlines</i> and <i>Bulb J149 F</i> sheets at front of this section	

Cap	Recessed Small Cavity (JEDEC No. J1-21)
Base.	Small-Button Neoeightar 7-Pin, Arrangement 1, (JEDEC No. B7-208)

Basing Designation for BOTTOM VIEW. 8HR

- Pin 1—Heater
- Pin 2—Grid No.1
- Pin 3—Grid No.2
- Pin 4—Grid No.4
- Pin 6—Grid No.1
- Pin 7—Cathode
- Pin 8—Heater
- Cap—Anode (Grid No.3, Grid No.5, Screen, Collector)
- C—External Conductive Coating



$\leftarrow$ Indicates a change.



MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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

Anode Voltage	{ 20000 max 10000 min	V V
Grid-No.4 (Focusing) Voltage		
Positive value.	1250 max	V
Negative value.	400 max	V
Grid-No.2 Voltage	{ 70 max 40 min	V V
Cathode Voltage		
Negative peak value	2 max	V
Negative bias value	0 max	V
Positive bias value	100 max	V
Positive peak value	150 max	V
Heater Voltage.	{ 6.9 max 5.7 min	V 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.	300 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 CATHODE-DRIVE SERVICE

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

Anode Voltage	16000	V
Grid-No.4 Voltage ^b	100	V
Grid-No.2 Voltage	50	V
Cathode Voltage for visual extinction		
of focused raster	32 to 50	V
Field Strength of required adjustable		
centering magnet.	0 to 8	G

MAXIMUM CIRCUIT VALUE

Grid-No.1 Circuit Resistance.	1.5 max	MΩ
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^a External conductive coating and implosion protection hardware must be grounded.

^b The grid-No.4 voltage required for optimum focus of any individual tube will have a value anywhere between -100 and +300 volts with the combined grid-No.1 voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on a 10-1/2-inch by 14-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

