

19EHP4A

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

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	$\begin{cases} 1750 \text{ max} \\ 1250 \text{ min} \end{cases}$	$\begin{matrix} \text{pF} \\ \text{pF} \end{matrix}$
Heater Current at 6.3 volts	600 ± 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%

MECHANICAL

Weight (Approx.).	15 lbs
Overall Length.	11.625 ± 0.250 in
Neck Length	4.375 ± 0.125 in
Projected Area of Screen.	172 sq in
External Conductive Coating	

Type.	Regular-Band
Contact area for grounding.	Near Reference Line

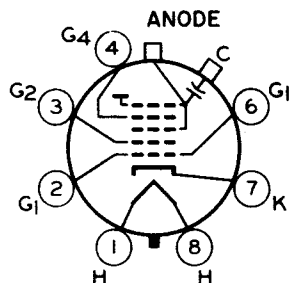
For Additional Information on Coatings and Dimensions

See *Picture-Tube Dimensional-Outlines* and *Bulb J149 F* 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



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MAXIMUM AND MINIMUM RATINGS, DESIGN-MAXIMUM VALUES

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

Anode Voltage	{ 18000 max 10000 min	V V
Grid-No.4 (Focusing) Voltage		
Positive value.	1100 max	V
Negative value.	550 max	V
Grid-No.2 Voltage	{ 550 max 200 min	V V
Grid-No.1 Voltage		
Negative peak value	220 max	V
Negative bias value	155 max	V
Positive bias value	0 max	V
Positive peak value	2 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 GRID-DRIVE SERVICE

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

Anode Voltage	16000	V
Grid-No.4 Voltage	0 to 400	V
Grid-No.2 Voltage	300	V
Grid-No.1 Voltage for visual extinction of focused raster	-35 to -72	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	0 to 400	V
Grid-No.2 Voltage	400	V
Cathode Voltage for visual extinction of focused raster	40 to 76	V

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.

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

