

16BGP4

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 **114° MAGNETIC DEFLECTION**
NO ION-TRAP MAGNET REQUIRED

Electrical:

Direct Interelectrode Capacitances:

Grid No.1 to all other electrodes	6	pf
Cathode to all other electrodes	5	pf
External conductive coating to anode ^a	{ 1300 max. 800 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.) 54%

Mechanical:

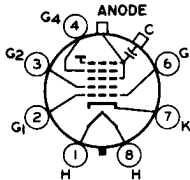
Weight (Approx.) 9.5 lbs
Overall Length 10.569" ± .242"
Neck Length 4.375" ± .125"
Projected Area of Screen 125 sq. in.
External Conductive Coating:

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 J125 B* 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	{ 20000 max. 12000 min.	volts volts
Grid-No.4 Voltage:		
Positive value.	1100 max.	volts
Negative value.	550 max.	volts
Grid-No.2 Voltage	{ 550 max. 200 min.	volts 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. 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:		
Peak value.	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	16000	volts
Grid-No.4 Voltage ^b	100	volts
Grid-No.2 Voltage	300	volts
Cathode Voltage for visual extinction		
of focused raster	28 to 60	volts
Field Strength of required adjustable		
centering magnet.	0 to 8	gauss

Maximum Circuit Values:

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 -100 and +300 volts with the combined cathode voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on a 9-inch by 12-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

