



PICTURE TUBES

(MONOCHROME WITH MAGNETIC DEFLECTION)

JEDEC REGISTRATION DATA
TUBE TYPE 16AXP4

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DESCRIPTION

The 16AXP4 is a 16 inch electrostatic-focus and magnetic deflection rectangular glass lightweight picture tube employing an integral protective window. Other outstanding features include a short over-all length, a small neck diameter and a non-ion trap gun. The fluorescent screen is aluminized to increase light output and reduce undesirable screen changing. An external conductive coating is provided to serve as a filter capacitor when grounded.

ELECTRICAL DATA

Focusing Method	Electrismatic
Deflection Method	Magnetic
Deflection Angles(Approximate)	
Diagonal	114 degrees
Horizontal	102 degrees
Vertical	84 degrees
Direct Interelectrode Capacitances	
Cathode to All Other Electrodes (Approximate)	5 uuf
Grid No.1 to All Other Electrodes (Approximate)	6 uuf
External conductive coating to anode	1500 max. uuf 1000 min. uuf
Heater Current at 6.3 volts	450 ± 23 ma
Heater Warm-up Time	11 seconds
Electron Gun	
Ion Trap	No
Focus Lens	Unipotential

from JEDEC release #4197, March 25, 1963

OPTICAL DATA

Phosphor Number	P4 Aluminized
Light Transmittance at Center (Approximate)	60 per cent
Antireflection Treatment	None

MECHANICAL DATA

Overall Length	10 1/8 \pm 1/4 inches
Neck Length	3 13/16 \pm 3/32 inches
Greatest Dimensions of Tube (At mold seam)	
Diagonal	15 11/16 \pm 1/8 inches
Width	13 45/64 \pm 1/8 inches
Height	11 5/32 \pm 1/8 inches
Minimum Useful Screen Dimensions (projected)	
Diagonal	14 7/8 inches
Horizontal Axis	12 15/16 inches
Vertical Axis	10 1/4 inches
Area	125 sq. inches
Implosion Protection	Integral Protective Window
Bulb	J125A1
Shield	FP125A1
Bulb Contact	J1-21
Base	B7-208
Basing	8HR
Bulb Contact Alignment	
Anode contact aligns with Pin Position No. 4	\pm 30 degrees

RATINGS (Design Maximum System)

Unless otherwise specified, voltage values are positive and measured with respect to cathode.

Maximum Anode Voltage	18000 volts
Minimum Anode Voltage	11000 volts
Maximum Grid No. 4 (Focusing Electrode) Voltage	+1000,- 500 volts
Maximum Grid No. 2 Voltage	550 volts
Minimum Grid No. 2 Voltage	200 volts
Grid No. 1 Voltage	
Maximum negative value	155 volts dc
Maximum negative peak value	220 volts
Maximum positive value	0 volts dc
Maximum positive peak value	2 volts
Maximum Heater Voltage	6.9 volts
Minimum Heater Voltage	5.7 volts
Maximum Heater - Cathode Voltage	
Heater negative with respect to cathode	
During warm-up period not to exceed 15 seconds	450 volts
After equipment warm-up period	200 volts
Heater positive with respect to cathode	200 volts

TYPICAL OPERATING CONDITIONSGRID DRIVE SERVICE

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

Anode Voltage	15000 volts dc
Grid No. 4 Voltage (Focusing Electrode)(Notes 2 and 3)	250 volts dc
Grid No. 2 Voltage	300 volts dc
Grid No. 1 Voltage (Note 1)	- 40 to - 72 volts dc

CATHODE DRIVE SERVICE

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

Anode Voltage	15000 volts dc
Grid No. 4 Voltage (Focusing Electrode) (Notes 2 and 3)	250 volts dc
Grid No. 2 Voltage	300 volts dc
Cathode Voltage (Note 1)	40 to 60 volts dc

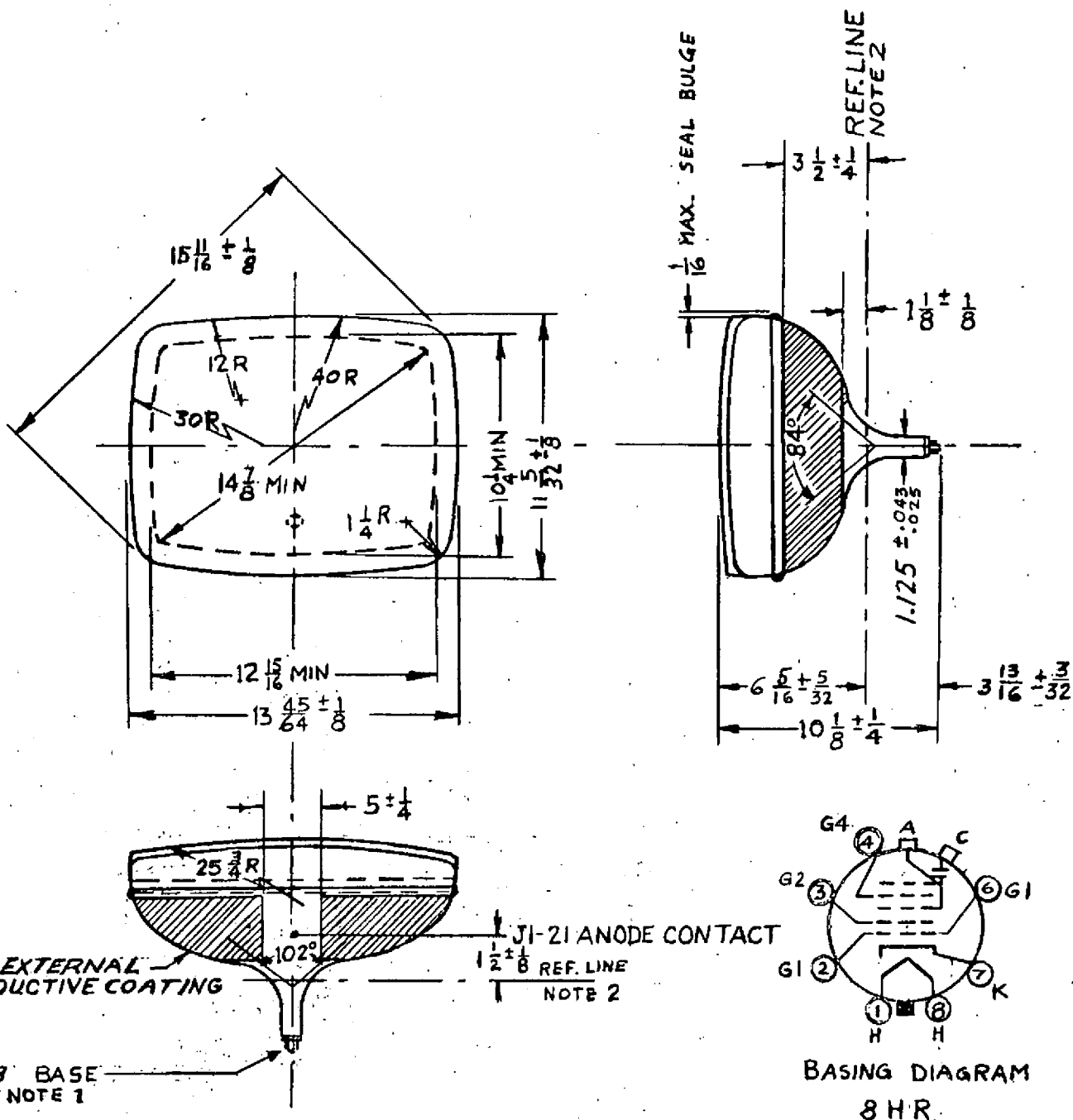
MAXIMUM CIRCUIT VALUES

Maximum Grid No. 1 Circuit Resistance	1.5 megohms
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NOTES

1. Visual extinction of focused raster.
2. With the combined Grid No. 1 bias voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on a 12 15/16" by 10 1/4" pattern from RCA 2F21 monoscope or equivalent.
3. Individual tubes will have satisfactory focus at same value between 0 and 500 volts.

OUTLINE DRAWING



NOTES:

1. The plane through the tube axis and pin No.4 may vary from the plane through the tube axis and bulb contact by an angular tolerance(measured about the tube axis) of $\pm 30^\circ$. Bulb Contact is on the same side as pin No. 4.
2. Reference line ab determined by reference line gauge No. G126.
3. Deflection angle on the diagonal is 114 degrees.

PIN CONNECTIONS

- 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
- Bulb Contact: Anode