



CORPORATION

5600 WEST JARVIS AVENUE

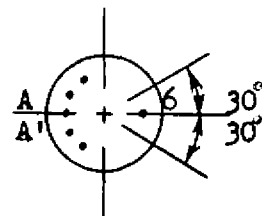
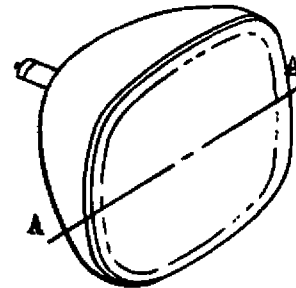
CHICAGO 48, ILLINOIS

TELEPHONE MULBERRY 5-5000

TELETYPE 312-265-1293

24BCP4DESCRIPTION

24" Direct View 90° Magnetic Deflection
 Rectangular Glass Envelope Electrostatic Focus
 Spherical Faceplate External Conductive Coating
 Gray Filter Glass No Ion Trap
 Aluminized Screen Bonded Implosion Panel
 6.3 Volt, 600 Ma. Heater



BOTTOM VIEW
BASE

ELECTRICAL DATA

Focusing Method

Electrostatic

Deflection Angles, Approximate

Horizontal

85 Degrees

Vertical

68 Degrees

Diagonal

90 Degrees

Direct Interelectrode Capacitances

Cathode to all other electrodes, approximate

5 uuf

Grid #1 to all other electrodes, approximate

6 uuf

External Conductive Coating to Anode

2,500 max. uuf

2,000 min. uuf

Heater Current at 6.3 volts

600 $\pm$ 10% Ma.

Heater Warm-up Time

11 Seconds

OPTICAL DATA

Phosphor Number

P4 Aluminized

Light Transmittance at Center, Approximate

45 Percent

MECHANICAL DATA

Overall Length

19 3/8 $\pm$ 7/16 Inches

Greatest Dimensions of Tube

Diagonal

24 $\pm$ 1/8 Inches

Width

22 11/16 $\pm$ 1/8 Inches

Height

18 7/16 $\pm$ 1/8 Inches

Minimum Useful Screen Dimensions (Projected)

Diagonal

22 11/16 Inches

Horizontal Axis

21 7/16 Inches

Vertical Axis

16 7/8 Inches

Area

332 Sq. Inches

Neck Length

5 1/2 $\pm$ 3/16 Inches

Bulb

J192A2

Implosion Panel

PPG SK3123 or equivalent

Bulb Contact

J1-21

Base

B6-203

Basing

12L

Bulb Contact Alignment

Anode contact aligns with pin position #6

 $\pm$ 30 Degrees

Aug. 1963

page 1 of 3

RATINGS (Design Maximum System)

Unless otherwise specified, voltages are positive and measured with respect to cathode

Maximum Anode Voltage	22,000	Volts
Minimum Anode Voltage	16,000	Volts
Maximum Grid #4 (Focusing Electrode) Voltage	+ 1100 - 500	Volts
Maximum Grid #2 Voltage	550	Volts
Minimum Grid #2 Voltage	200	Volts
Grid #1 Voltage		
Maximum Negative Value	220	Volts DC
Maximum Negative Peak Value	155	Volts
Maximum Positive Value	0	Volts DC
Maximum Positive Peak Value	2	Volts
Maximum Heater Voltage	7	Volts
Minimum Heater Voltage	5.8	Volts
Maximum Heater-Cathode Voltage		
Heater negatives 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 CONDITIONS

GRID DRIVE SERVICE

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

Anode Voltage	18,000	Volts
Grid #4 Voltage (Focusing Electrode) ^{2, 3}	250	Volts
Grid #2 Voltage	400	Volts
Grid #1 Voltage ¹	-36 to -94	Volts

MAXIMUM CIRCUIT VALUES

Maximum Grid #1 Circuit Resistance	1.5	Megohms
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NOTES

1. Visual extinction of focused raster.
2. With the combined grid #1 bias voltage and video-signal voltage adjusted to give an anode current of 100 microamperes on a 21 7/16 x 16 7/8 pattern from 2F21 Monoscope or equivalent.
3. Individual tubes will have satisfactory focus at some value between 0 and 400 volts.

THE



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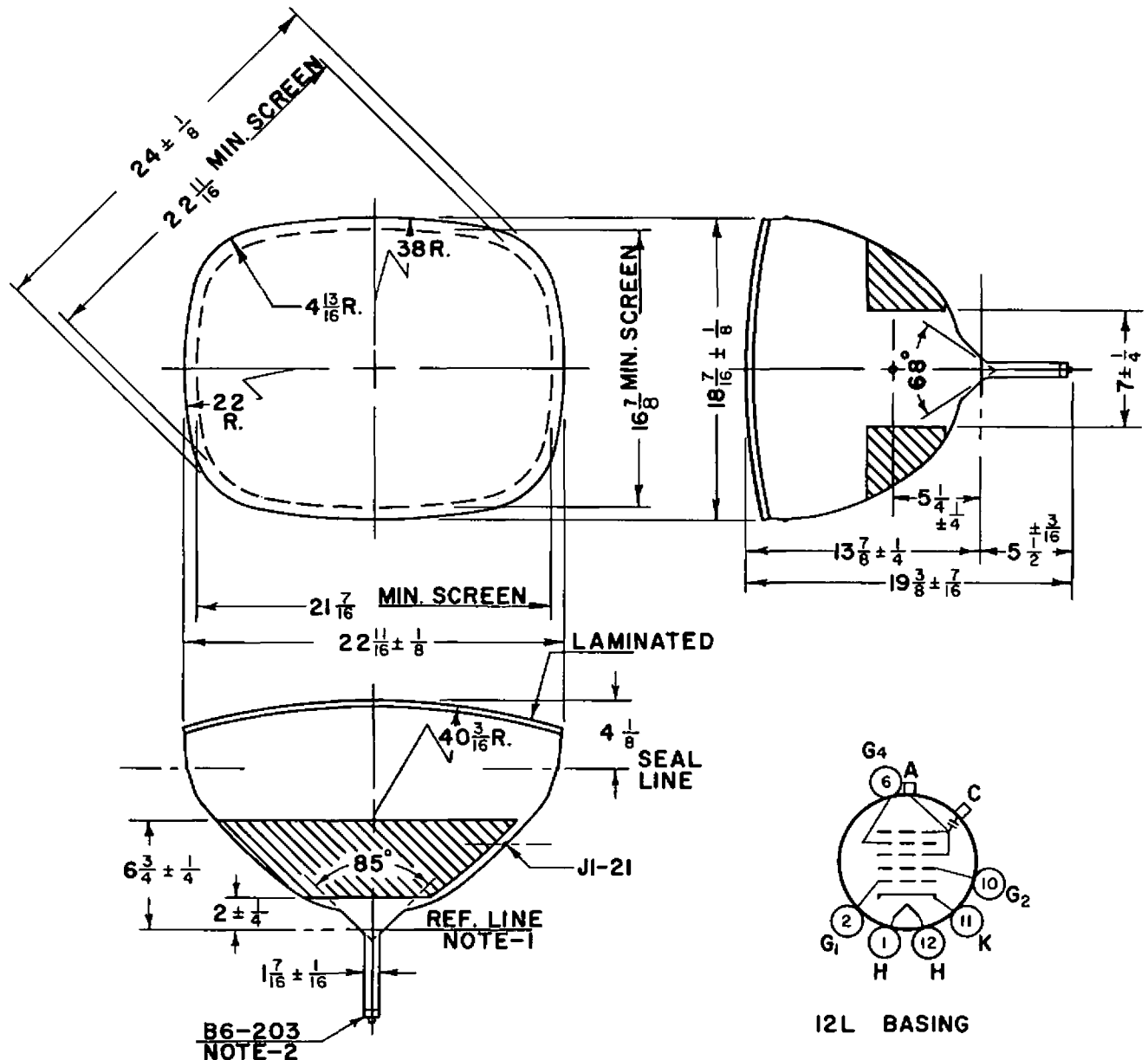
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NOTES

1. REFERENCE LINE DETERMINED BY PLANE C-C OF JEDEC. REFERENCE LINE GAUGE NO.116
2. BASE PIN NO.6 ALIGNS WITH ANODE CONTACT WITHIN 30°