

June 15, 1965

QUICK REFERENCE DATA

110° MAGNETIC DEFLECTION
10.125" x 7.625" SCREEN SIZE
4.375" NECK LENGTH
SPHERICAL GRAY FILTER GLASS

BANDED
IMPLOSION PROTECTION

6.3 VOLT, 450 MA HEATER
G2 VOLTAGE (250 VOLTS)
NO ION TRAP
ELECTROSTATIC FOCUS

DETAILED DATA

ELECTRICAL

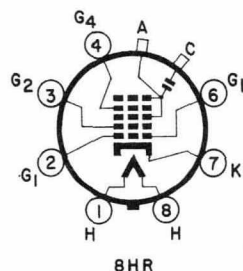
Focusing Method Low Voltage Electrostatic
Deflection Method Magnetic
Deflection Angles (Approx.):
Diagonal 110 Degrees
Horizontal 99 Degrees
Vertical 80 Degrees
Direct Interelectrode Capacitances:
Cathode to All other Electrodes (Approx.) 5 pF
Grid No. 1 to All other Electrodes (Approx.) 6 pF
External Conductive Coating to Anode:
Minimum 500 pF
Maximum 750 pF
Resistance Between External Conductive Coating and
Implosion Protection Hardware (minimum) 5 Megohms
Heater Current at 6.3 Volts 450 ± 5% mA
Heater Warm-up Time (Note 1) 11 Seconds

OPTICAL

Phosphor Number Aluminized P4
Light Transmittance at Center (Approx.) 48%

MECHANICAL

Over-all Length 9.348" ± 0.250"
Neck Length 4.375" ± 0.125"
Greatest Dimensions of Tube:
Diagonal 12.425" ± 0.100"
Width 10.987" ± 0.100"
Height 8.589" ± 0.100"
Minimum Useful Screen Dimensions (projected):
Diagonal 11.625"
Horizontal Axis 10.125"
Vertical Axis 7.625"
Area 74 Sq. Inches
Implosion Protection Banded
Bulb Contact J1-21
Base B7-208
Basing 8HR
Net Weight 6 Pounds



RATINGS

Design Maximum System

Unless Otherwise Specified, Voltage Values are Positive
and Measured with Respect to Grid 1.

Maximum Anode Voltage 16000 Volts
Minimum Anode Voltage 9000 Volts
Maximum Grid 4 (Focusing Electrode)
Voltage +1100, -550 Volts
Maximum Grid 2 Voltage 400 Volts
Minimum Grid 2 Voltage 200 Volts
Voltage:
Maximum Negative Bias Value 0 Volts
Maximum Negative Peak Value 2 Volts
Maximum Positive Bias Value 154 Volts
Maximum Positive Peak Value 220 Volts
Maximum Heater Voltage 6.93 Volts
Minimum Heater Voltage 5.67 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

LIMITING CIRCUIT VALUES

Maximum Grid 1 Circuit Resistance 1.5 Megohms
Minimum Grids 2 & 4 Circuit Resistance (Note 2) 10000 Ohms

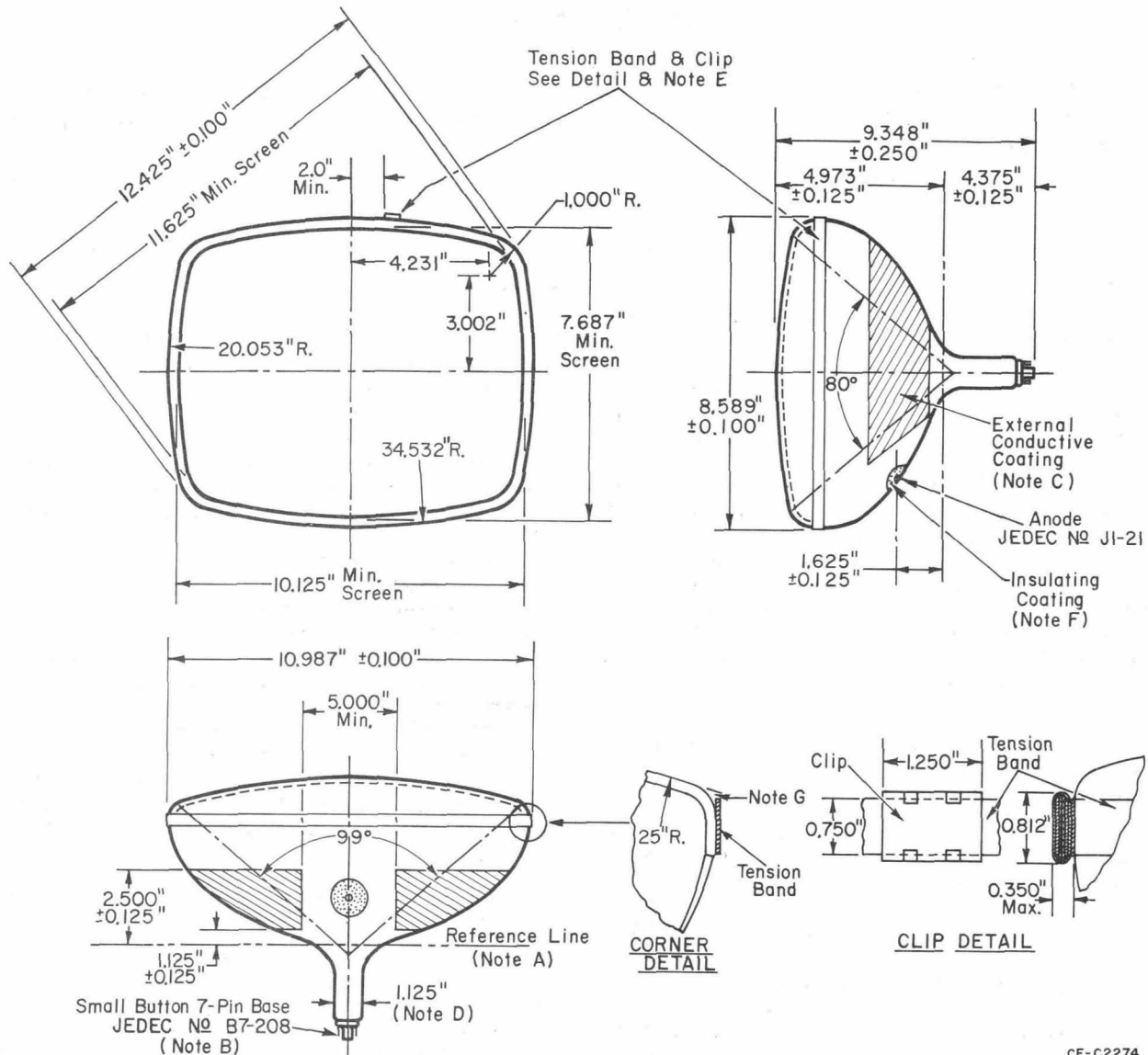
TYPICAL CATHODE DRIVE OPERATION

Unless Otherwise Specified, All Voltage Values
are Positive with Respect to Grid 1.

Anode Voltage 12000 Volts
Grid 4 Voltage (Focusing Electrode) (Note 3) 0 to 400 Volts
Grid 2 Voltage 250 Volts
Cathode Voltage for Raster Cutoff 35 to 65 Volts

NOTES

1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying 4 times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to 3 times rated heater voltage divided by rated heater current.
2. Protective resistance in the grids 2 & 4 circuits is advisable to prevent damage.
3. With the combined Grid No. 1 bias voltage and video-signal voltage adjusted to give an anode current of 150 microamperes on a 10.125" by 7.625" pattern from type 2F21 monoscope or equivalent. Individual tubes will have satisfactory focus at some value between 0 and 400 volts.



CE-C2274

- A. Yoke Reference Line is determined by plane surface of flared end of JEDEC Reference Line Gauge No. 126 when seated on funnel of tube.
- B. Lateral strains on base pins must be avoided. The socket should have flexible leads permitting movement. The perimeter of the base wafer will be inside a 1.750" diameter circle concentric with tube axis. Base pin 2 aligns with major axis within 30° and is on same side as anode terminal.
- C. External conductive coating forms supplementary filter capacitance and must be grounded.
- D. Neck diameter may be a maximum of 1.168" at the splice.
- E. Tension band must be grounded.
- F. Transparent, insulating coating, 3" in diameter. Clean only with soft, dry, lintless cloth.
- G. The tension band will extend towards the faceplate a maximum distance that will not exceed the intersection of the leading edge of the band and the extension of the faceplate radius.

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