

July 1, 1965

QUICK REFERENCE DATA

94° MAGNETIC DEFLECTION
15.125" × 19.250" MIN. SCREEN SIZE
5.125" NECK LENGTH
SPHERICAL GRAY FILTER GLASS

INTEGRAL SAFETY GLASS
IMPLOSION PROTECTION

6.3 VOLT, 600 MA HEATER
ALUMINIZED SCREEN
NO ION TRAP
ELECTROSTATIC FOCUS

DETAILED DATA

ELECTRICAL

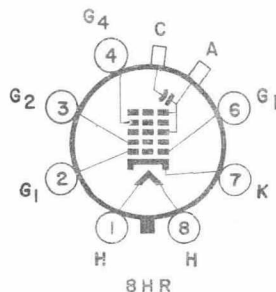
Focusing Method Low Voltage Electrostatic
Deflection Method Magnetic
Deflection Angles (Approx.):
Diagonal 94 Degrees
Horizontal 83 Degrees
Vertical 68 Degrees
Direct Interelectrode Capacitances:
Cathode to All Other Electrodes (Approx.) 5 pF
Grid No. 1 to All Other Electrodes (Approx.) 6 pF
External Conductive Coating to Anode:
Minimum 1700 pF
Maximum 2500 pF
Heater Current at 6.3 Volts 600 ± 5% mA
Heater Warm-up Time (Note 1) 11 Seconds

OPTICAL

Phosphor Number Aluminized P4
Light Transmittance at Center (Approx.) 40%

MECHANICAL

Over-all Length 17.530" ± 0.375"
Neck Length 5.125" ± 0.125"
Greatest Dimensions of Tube:
Diagonal 24.703" ± 0.093"
Width 21.312" ± 0.125"
Height 17.406" ± 0.093"
Minimum Useful Screen Dimensions (Projected):
Diagonal 22.312"
Horizontal Axis 19.250"
Vertical Axis 15.125"
Area 282 Sq. Inches
Implosion Protection Integral Safety Glass
Bulb EIA J187P1
Shield EIA FP198A1
Bulb Contact EIA J1-21
Base EIA B7-208
Basing EIA 8HR
Net Weight 30 Pounds



RATINGS

Design Maximum System
Unless Otherwise Specified, Voltage Values are Positive
and Measured with Respect to Grid 1.
Maximum Anode Voltage (Note 2) 23500 Volts
Minimum Anode Voltage 11000 Volts
Maximum Grid 4 (Focusing Electrode)
Voltage +1100, -550 Volts
Maximum Grid 2 Voltage 650 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-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

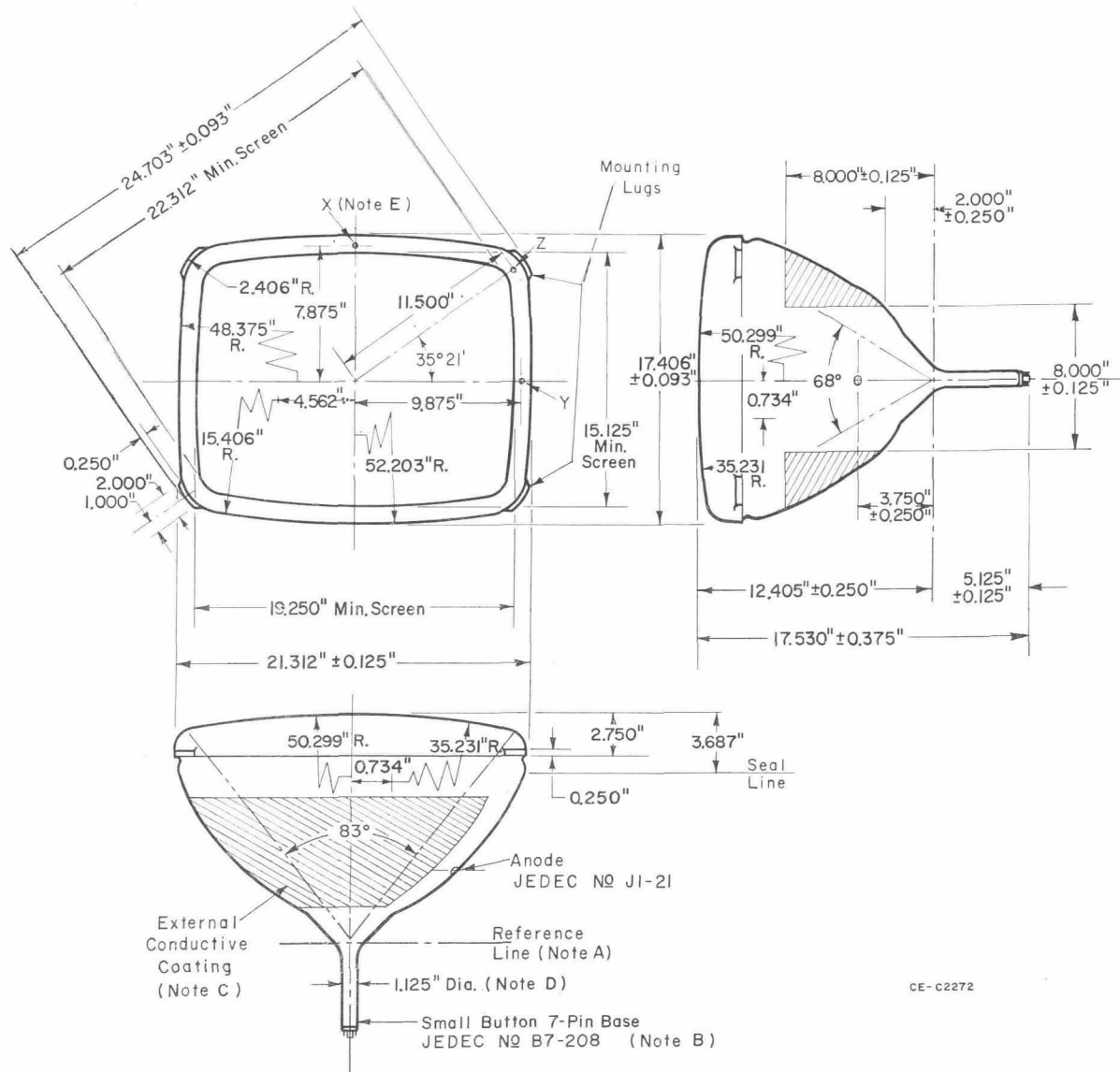
Maximum Grid 1 Circuit Resistance 1.5 Megohms
Minimum Grids 2 & 4 Circuit Resistance (Note 3) 10000 Ohms

TYPICAL CATHODE DRIVE OPERATION

Unless Otherwise Specified, all Voltage Values
are Positive with Respect to Grid 1.
Anode Voltage (Note 2) 16000 Volts
Grid 4 Voltage (Focusing Electrode) 0 to 500 Volts
Grid 2 Voltage (Note 4) 500 Volts
Cathode Voltage for Raster Cutoff 45 to 95 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. Operation with voltage in excess of 16KV may require shielding to limit radiation of very soft X-rays.
3. Protective resistance in the grids 2 & 4 circuits is advisable to prevent damage.
4. It is recommended that not less than 300 volts on Grid 2 be used, as resolution is affected at lower voltages.



CE-C2272

- Yoke Reference Line is determined by plane surface of flared end of JEDEC Reference Line Gauge No. 126 when seated on funnel of tube. With a minimum neck length tube, the PM centering magnet (0 to 8 gauss) should extend no more than 2.75" from Yoke Reference Line.
- 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 1.75" diameter circle concentric with tube axis. Base pin 4 aligns with major axis with in 30° and is on same side as anode terminal.
- External conductive coating forms supplementary filter capacitance and must be grounded.
- Neck diameter may be a maximum of 1.168" at the splice.
- Planes perpendicular to the axis and passing through points X, Y and Z are determined as follows:
 - Plane tangent to crown of face, to plane of X = 0.758" nom.
 - Plane of X to plane of Y = 0.463 ± 0.030 ".
 - Plane of X to plane of Z = 0.970 ± 0.030 ".
 - Plane of X to plane of edge of shield = 1.960" nom.

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