

engineering data service

16BEP4

CHARACTERISTICS

CHARACTERISTICS											
GENERAL DATA											
Focusing Method Electrostatic Deflection Method											
Horizontal											
Fluorescence											
Directly to Face of Tube) Light Transmittance of Faceplate Assembly (Approx.)											
ELECTRICAL DATA											
Heater Voltage 6.3 Volts Heater Current											
Direct Interelectrode Capacitances (Approx.) Cathode to All Other Electrodes											
External Conductive Coating to Anode ² 1200 pf 800 pf	Max. Min.										
MECHANICAL DATA											
Minimum Useful Screen Dimensions (Maximum Assured) Height	S										
RATINGS											
MAXIMUM RATINGS (Design Maximum Values) Cathode Drive Service ³ Anode Voltage											
Maximum 18,000 Volts Minimum 10,000 Volts Grid No. 4 Voltage (Focusing Electrode) -400 to +1250 Volts Grid No. 2 Voltage 70 Volts	dc dc dc dc										
Cathode Voltage Positive Bias Value	dc										
Negative Bias Value	dc										
15 Seconds 450 Volts											
After Equipment Warm-up Period											

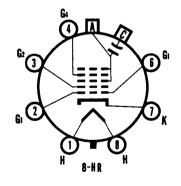
200 Volts

Heater Positive with Respect to Cathode . . .

QUICK REFERENCE DATA

Television Picture Tube 16" Direct Viewed Rectangular Glass Type Bonded Shield Gray Filter Glass Aluminized Screen **Electrostatic Focus** Low Grid No. 2 Voltage 114° Magnetic Deflection No Ion Trap External Conductive Coating 6.3 Volt/300 Ma Heater





SYLVANIA **ELECTRONIC TUBES**

A Division of Sylvania Electric Products Inc.

> PICTURE TUBE **OPERATIONS**

SENECA FALLS, NEW YORK

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File Under

TELEVISION PICTURE TUBES



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TYPICAL OPERATING CONDITIONS

Cathode Drive Service ³												
Anode Voltage											14,000 Volts	dc
Grid No. 4 Voltage for Focus											0 to 400 Volts	dc
Grid No. 2 Voltage											50 Volts	dc
Cathode Voltage Required for Cutoff ⁴	•			•						•	+30 to $+48$ Volts	dc
CIRCUIT VALUES												
Grid No. 1 Circuit Resistance											1.5 Megohm	s Max.

NOTES:

- 1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80 % of the rated heater voltage after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times the rated heater voltage divided by the rated heater current.
- 2. External conductive coating must be grounded.
- 3. Voltages are positive with respect to Grid No. 1 unless indicated otherwise.
- 4. Visual extinction of focused raster. For cutoff of the undeflected focused spot, the absolute value of the bias between cathode and grid will increase by about 5 volts.

WARNING:

X-ray radiation shielding may be necessary to protect against possible danger of personal injury from prolonged exposure at close range if this tube is operated at higher than the manufacturer's Maximum Rated Anode Voltage or 16,000 volts, whichever is less.

OUTLINE

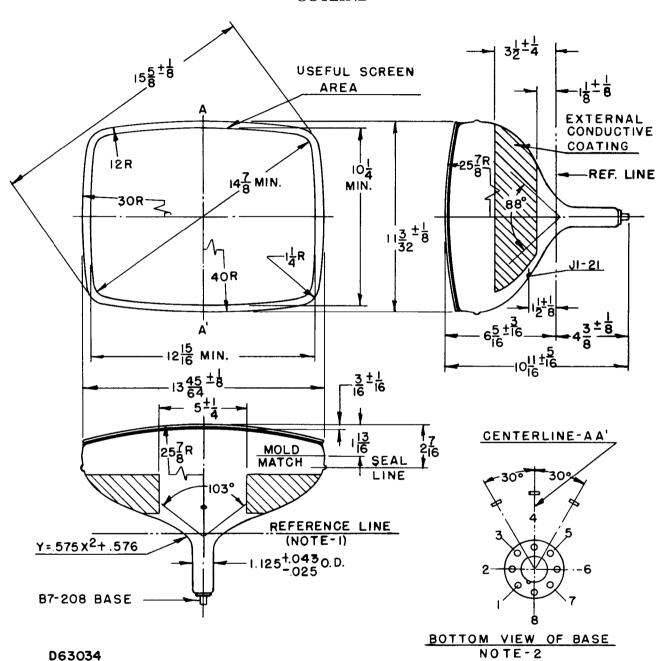


DIAGRAM NOTES:

- 1. Reference line is determined by plane C-C' of JEDEC No. 126 Reference Line Gauge when the gauge is seated against the bulb.
- 2. Base Pin No. 4 aligns with vertical centerline (A-A') within 30° and is on same side as anode contact (J1-21).
- 3. Dimensions are in inches.