

CHARACTERISTICS

GENERAL DATA

Focusing Method	.	.	.	.	.	.	.	.	Electrostatic
Deflection Method	.	.	.	.	.	.	.	.	Electrostatic
Phosphors	.	.	.	.	.	.	.	.	Aluminized
Types*	Fluorescence		Phosphorescence						Persistence
5BHP1	Green								Medium
5BHP2	Blue-Green		Green						Long
5BHP5	Blue								Very Short
5BHP7	Blue-White		Yellow						Long
5BHP11	Blue								Short
5BHP15	Blue-Green								Extremely Short
Faceplate	.	.	.	.	.	.	.	.	Clear

*In addition to the types shown, the 5BHP- can be supplied with several other screen phosphors.

ELECTRICAL DATA

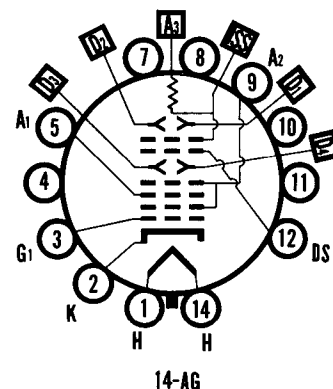
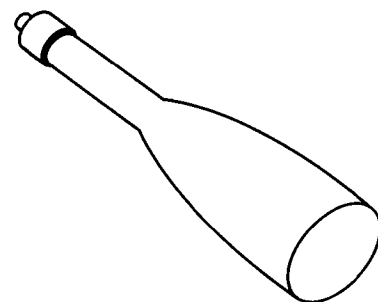
Heater Voltage	6.3 Volts
Heater Current	$0.6 \pm 10\%$ Amperes
Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	4.6 $\mu\mu\text{f}$
Grid No. 1 to All Other Electrodes	6.4 $\mu\mu\text{f}$
D1 to D2	1.9 $\mu\mu\text{f}$
D3 to D4	1.5 $\mu\mu\text{f}$
D1 to All Other Electrodes Except D2	3.5 $\mu\mu\text{f}$
D2 to All Other Electrodes Except D1	3.5 $\mu\mu\text{f}$
D3 to All Other Electrodes Except D4	2.8 $\mu\mu\text{f}$
D4 to All Other Electrodes Except D3	2.8 $\mu\mu\text{f}$
Post Accelerator Helix Resistance	200 to 600 Megohms

MECHANICAL DATA

Minimum Useful Screen Diameter	4 1/2 Inches
Anode No. 3 Contact (Recessed Small Cavity Cap)	J1-21
Bulb (Modified)	J42K
Base (Medium Shell Diheptal 12-Pin)	B12-37
Basing	14AG
Base Alignment	
D3-D4 trace aligns with Pin No. 1	± 10 Degrees
Positive Voltage on D1 deflects beam approx. toward Pin No. 4	
Positive Voltage on D3 deflects beam approx. toward Pin No. 1	
Angle Between traces D1-D2 and D3-D4	90 ± 1 Degrees

QUICK REFERENCE DATA

5" Direct Viewed
Flat Faceplate
Round Glass Type
Electrostatic Deflection
Electrostatic Focus
Helical Resistor Post
Deflection Acceleration
High Deflection Sensitivity
High Deflection Accuracy
Aluminized Screen



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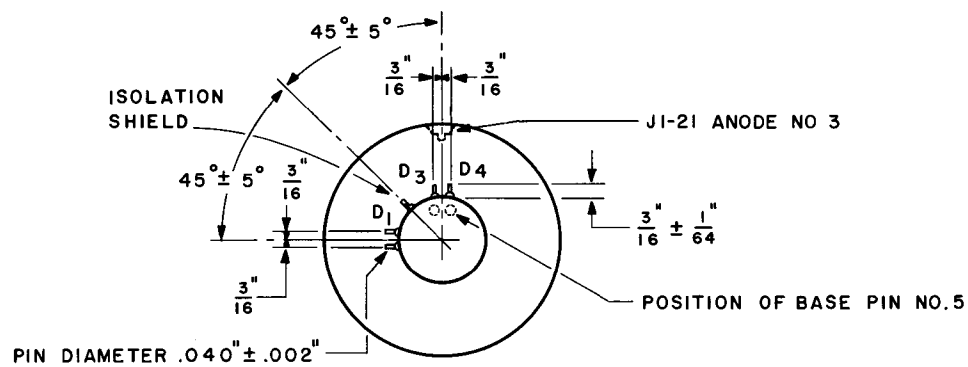
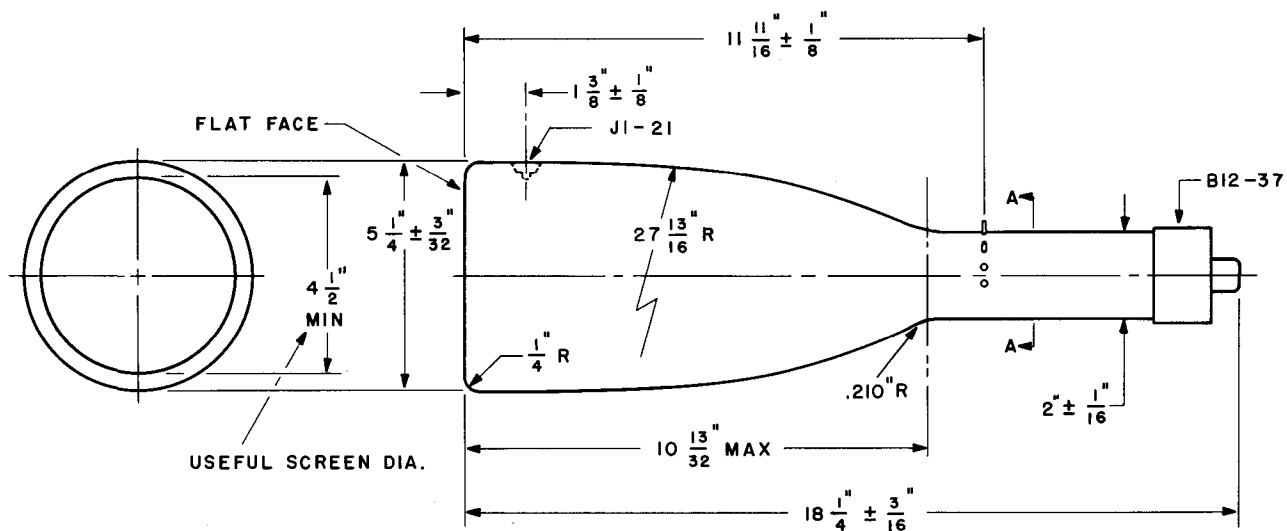
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NOTES: (cont'd)

- 2. The isolation shield and the lower end of the post accelerator helix are connected together within the tube. With the proper potential on this electrode combination, barrel and pin-cushion distortions are minimized.*
- 3. Adjustment of deflection plate shield voltage provides improved linearity of D3-D4 deflection by controlling the edge effect of D3-D4 plate field. In many applications Pin No. 12 may be connected externally to the isolation shield.*
- 4. Under the typical operating conditions listed the Anode No. 2 voltage is made variable from 1575 volts to 1850 volts to provide for astigmatism control. In order to maintain proper astigmatism adjustment as total cathode current is varied, it is recommended that the resistance in the Anode No. 2 circuit be limited to 12,500 ohms.*
- 5. Visual extinction of undeflected focused spot.*
- 6. If use is made of the full deflection capabilities of the tube, the deflection plates will intercept part of the electron beam near the edge of the scan; hence a low impedance deflection plate drive is desirable.*
- 7. With a 4 x 10 cm rectangular raster centered on the face of the tube, the raster edges will not deviate from straight parallel lines by more than 1 mm total on the left and right edges, nor by more than 0.5 mm total at the top and bottom.*
- 8. Connect deflection plates to Anode No. 2.*

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.



SECTION "A-A"

S 58067