SYLVANIA

engineering data service

SYLVANIA
5BCP1
5BCP*

CHARACTERISTICS

GENERAL DATA

Focusing Method	Magnetic
Deflecting Method	Magnetic
Deflection Angle (approx.)	70 Degrees

Types*	5BCP1	5BCP4	5BCP7	5BCP11
Fluorescence	Green	White	Blue	Blue
Phosphorescence	—	—	Yellow	—
Persistence	Medium	Medium	Long	Short

Faceplate . . . . . Clear

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

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	0.3 ± 10% Ampere
Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	3.7 $\mu\mu$f
Grid No. 1 to All Other Electrodes	3.5 $\mu\mu$f

MECHANICAL DATA

Minimum Useful Screen Diameter	4¼ Inches
Bulb Contact (Recessed Small Ball Cap)	J1-22
Base	E9-37
Basing[1]	9HD
Bulb Contact Alignment	Plane of J1-22 Contact Passes Halfway Between Pins No. 1 and No. 9. ± 10 Degrees

J1-22 Contact on Same Side as Pins No. 1 and No. 9

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Voltage	11,000 Volts dc
Anode Input	6 Watts
Grid No. 1 Voltage	
Negative Bias Value	220 Volts dc
Positive Bias Value	0 Volts dc
Positive Peak Value	2 Volts dc
Peak Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	200 Volts
Heater Positive with Respect to Cathode	200 Volts

TYPICAL OPERATING CONDITIONS

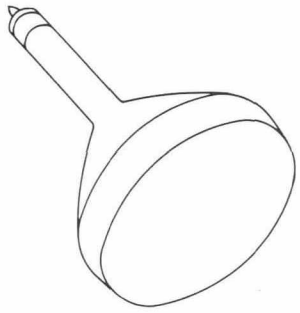
Anode Voltage	8,000 Volts dc
Grid No. 1 Voltage[2]	−25 to −75 Volts dc
Focusing Coil Current (approx.)[3]	56 to 84 Ma dc
Line Width "A" at I_b = 200 μa[4]	.011 Inches Max.
Spot Position[5]	¼ Inch

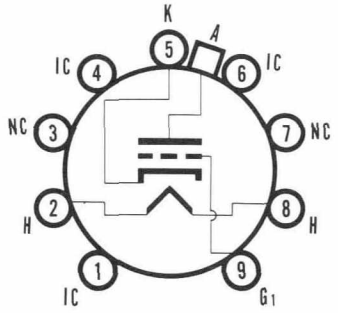
CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.

QUICK REFERENCE DATA

Special Purpose Tube
5" Direct Viewed
Round Glass Type
Magnetic Deflection
Magnetic Focus
⅞" Diameter Neck





9HD

SYLVANIA
ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

PICTURE TUBE OPERATIONS
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

NOVEMBER, 1958

NOTES:

1. *A socket with a center opening to clear the tubulation should be used. Care should be taken in handling the tube to avoid damaging the exposed tubulation and bending the base pins.*
2. *Visual extinction of undeflected, focused spot.*
3. *For JETEC No. 127 focus coil, or equivalent, with the Grid No. 1 bias voltage adjusted to produce a beam current of 200 μa. Distance from reference line to center of gap on focus coil shall be 2 inches.*
4. *Measured in accordance with MIL-E-1C.*
5. *The center of the undeflected, unfocused spot will fall within a circle of 1/4 inch radius concentric with the center of the tube face, with the tube shielded.*

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.

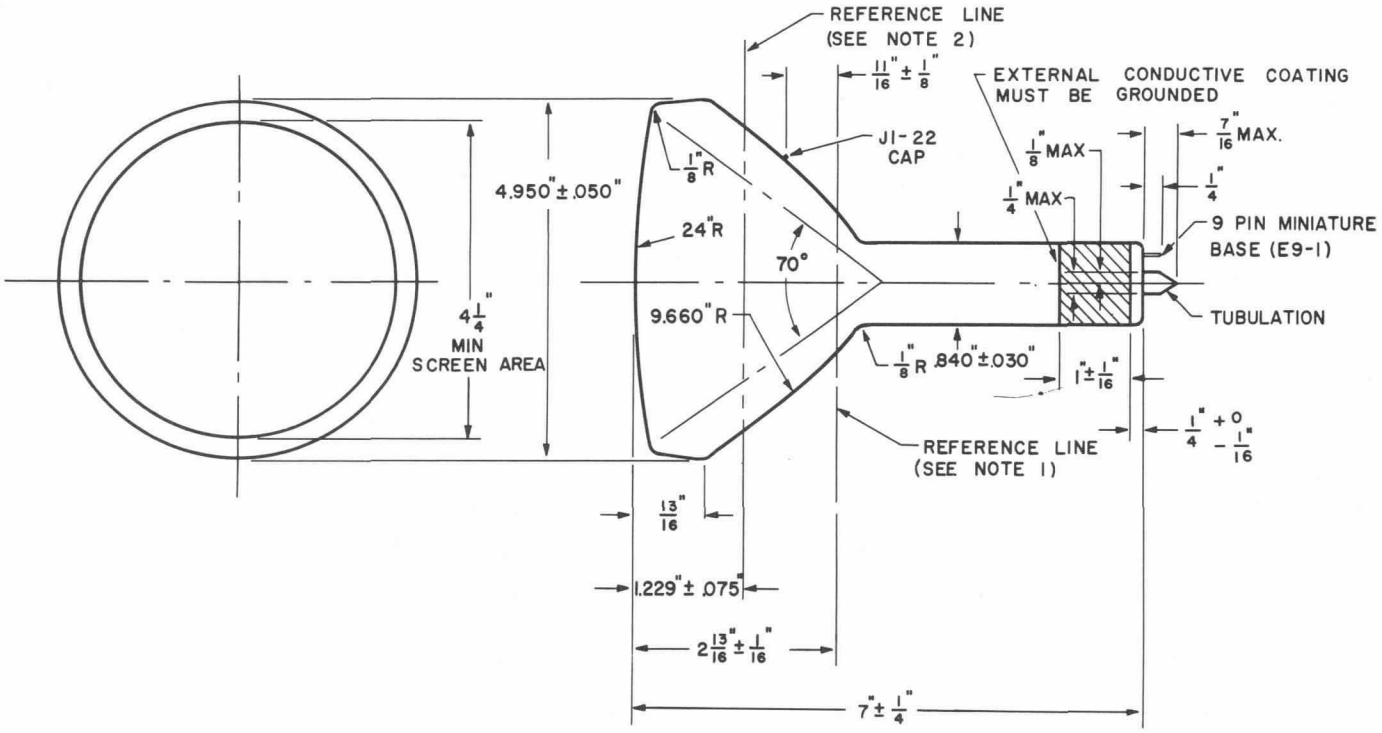


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DIAGRAM NOTES:

1. *Reference line is determined by the Point where leading edge of 1.640" reference line gauge No. 123 will stop.*
2. *Reference line is determined by the point where leading edge of a 4.625" ± .002 ring gauge will stop.*