

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflection Method	Magnetic
Deflection Angle (approx.)	50°
Types*	
Fluorescence	5WP11 Blue
Persistence	5WP15 Short
Screen	Extremely Short
Faceplate	Aluminized
	Flat, Clear

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

ELECTRICAL DATA

Heater Voltage	6.3 Volts
Heater Current	0.6 ± 10% Ampere
Direct Interelectrode Capacitances	
Cathode to All Other Electrodes	5 μμf
Grid No. 1 to All Other Electrodes	7.5 μμf Max.
External Conductive Neck Coating to Anode No. 2 ¹	500 μμf Max. 100 μμf Min.

MECHANICAL DATA

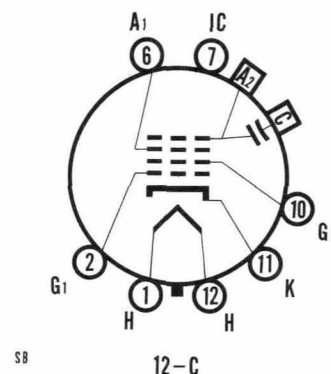
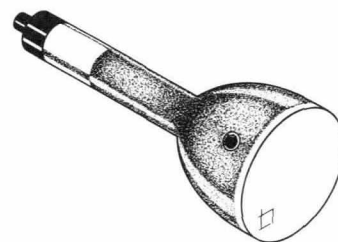
Minimum Useful Screen Diameter	4 1/4 Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Base (Small Shell Duodecal 7-Pin)	B7-51
Basing	12C
Bulb	C40 Exp. 14 or Equivalent

MAXIMUM RATINGS (Absolute Maximum Values)

Anode No. 2 Voltage	30,000 Volts dc
Anode No. 1 Voltage (Focusing Electrode)	6,600 Volts dc
Grid No. 2 Voltage	385 Volts dc
Grid No. 1 Voltage	
Negative Bias Value	165 Volts dc
Positive Bias Value	0 Volts dc
Positive Peak Value	2 Volts
Peak 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	140 Volts
Heater Positive with Respect to Cathode	140 Volts

QUICK REFERENCE DATA

5WP11—Video Recorder
5WP15—Flying Spot Scanner
5" Round Glass Type
Flat, Clear Faceplate
Magnetic Deflection
Acceleration Type
Electrostatic Focus
No Ion Trap
External Conductive
Coating on Neck
External Insulating
Coating on Bulb
Aluminized Screen



SYLVANIA ELECTRONIC TUBES

A Division of
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PICTURE TUBE OPERATIONS
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TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage ²	27,000	Volts	dc
Anode No. 1 Voltage for Focus	4200 to 5400	Volts	dc
Grid No. 2 Voltage ³	200	Volts	dc
Grid No. 1 Voltage Required for Cutoff ⁴	-42 to -98	Volts	dc
Anode No. 2 Current			
5WP11	20	μ a	dc
5WP15	100	μ a	dc
Max. Anode No 1. Current			
5WP11	25	μ a	dc
5WP15	150	μ a	dc
Grid No. 2 Current	-15 to +15	μ a	dc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
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NOTES:

1. External conductive neck coating must be grounded.
2. Brilliance and definition decrease with decreasing anode voltage. In general, the anode voltage should not be less than 15,000 volts.
3. Subject to variation of $\pm 40\%$ when Grid No. 1 Voltage cutoff is desired at the average cutoff value of -70 volts.
4. Visual extinction of undeflected focused spot.

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. The plane through the tube axis and vacant pin position No. 3 may vary from the plane through the axis and Anode No. 2 terminal by an angular tolerance (measured about the tube axis) of $\pm 10^\circ$.
Anode No. 2 terminal is on same side as vacant pin position No. 3.
2. Reference line is determined by the plane C-C' of the reference line gauge (JEDEC No. G112) when the gauge is seated on the glass cone.
3. External conductive coating must be grounded.