

**CHARACTERISTICS**

**GENERAL DATA**

Focusing Method . . . . .	Electrostatic		
Deflection Method . . . . .	Magnetic		
Deflection Angle (approx.) . . . . .	40 Degrees		
Types*			
	<b>5ZP15</b>	<b>5ZP16</b>	<b>5ZP24</b>
Fluorescence . . . . .	Blue-Green	Violet & Near Ultraviolet	Blue-Green
Persistence . . . . .	Extremely Short	Extremely Short	Extremely Short
Screen . . . . .	Aluminized		
Faceplate . . . . .	Clear, Non-Browning		

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

**ELECTRICAL DATA**

Heater Voltage . . . . .	6.3 Volts	
Heater Current . . . . .	0.6 ± 10% Ampere	
Direct Interelectrode Capacitances (approx.)		
Cathode to All Other Electrodes . . . . .	8 μmf	
Grid No. 1 to All Other Electrodes . . . . .	5 μmf	
External Conductive Neck Coating to Anode <sup>1</sup> . . . . .	500 μmf	Max.
	100 μmf	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 Contact Aligns with Vacant Pin Position No. 3 . . . . .	±10 Degrees

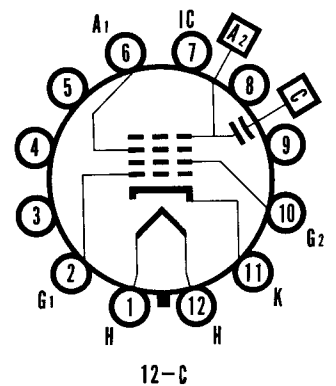
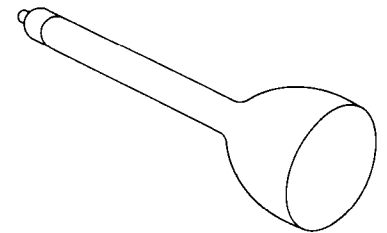
**RATINGS**

**MAXIMUM RATINGS (Absolute Maximum Values)**

Anode No. 2 Voltage . . . . .	30,000 Volts	dc
Anode No. 1 Voltage (Focusing Electrode) . . . . .	7,700 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 . . . . .	165 Volts	
Heater Positive with Respect to Cathode . . . . .	165 Volts	

**QUICK REFERENCE DATA**

- Flying Spot Scanner Tube
- 5" Round Glass Type
- Flat Faceplate
- Clear Non-Browning Faceplate
- Magnetic Deflection
- Acceleration Type Electrostatic Focus
- No Ion Trap
- External Conductive Coating on Neck
- External Insulating Coating on Bulb
- Aluminized Screen



**SYLVANIA ELECTRIC  
PRODUCTS INC.**

**TELEVISION PICTURE TUBE  
DIVISION  
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**TYPICAL OPERATING CONDITIONS**

Anode Voltage <sup>2</sup> . . . . .	27,000 Volts	dc
Anode No. 1 Voltage for Focus at $I_b = 15 \mu a$ . . . . .	5550 to 7050 Volts	dc
Grid No. 2 Voltage . . . . .	200 Volts	dc
Grid No. 1 Voltage Required for Cutoff <sup>3</sup> . . . . .	-42 to -98 Volts	dc
Anode Current . . . . .	15 $\mu a$	dc
Maximum Anode No. 1 Current at $I_b = 15 \mu a$ . . . . .	25 $\mu a$	dc
Grid No. 2 Current . . . . .	-15 to +15 $\mu a$	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 20,000 volts.
3. Visual extinction of undeflected focused spot.

**DIAGRAM NOTES:**

1. Reference line is determined by the plane C-C' of the reference line gauge (JETEC No. 110) when the gauge is resting on the glass cone.
2. External conductive coating must be grounded.

**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.

