

# engineering data service

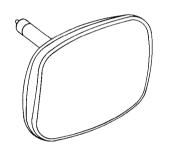
### **24AMP4**

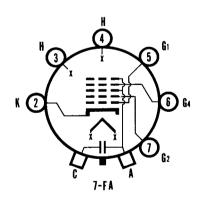
#### **CHARACTERISTICS**

CIMARCIERISTICS	
GENERAL DATA	
Focusing Method Elect	rostatic
Deflection Method	lagnetic
Deflection Angles (approx.)	b
Horizontal	. 105 Degrees
Diagonal	. 110 Degrees
Vertical	87 Degrees
Phosphor Alumir	Nized P4
Fluorescence	W nite Medium
Faceplate Gray Filte	er Glass
Faceplate	. 74 Percent
ELECTRICAL DATA	
Heater Voltage	63 Volts
Heater Voltage	5 + 5% Ampere
Heater Warm-up Time <sup>1</sup>	11 Seconds
Heater Warm-up Time <sup>1</sup> Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	5 μμ <b>f</b>
Grid No. 1 to All Other Electrodes	6 μμ <b>f</b>
External Conductive Coating to Anode <sup>2</sup>	2500 μμf Max
MECHANICAL DATA	2000 μμf Min
Minimum Useful Screen Dimensions (Maximum Assured)	<b>\</b>
Height	161/2 Inches
Width	217/ Inches
Diagonal	2213/16 Inches
_ Area	332 Sq. Inches
Bulb Contact (Recessed Small Cavity Cap)  Base  Basing  Weight (Approx.)	ivalent
Bulb Contact (Recessed Small Cavity Cap)	J1-21
Dase	B6-185
Weight (approx.)	26½ Pounds
	, <del>-</del>
RATINGS	
MAXIMUM RATINGS (Absolute Maximum Value	es)
Anode Voltage	22,000 Volts dc
Grid No. 4 Voltage (Focusing Electrode)550 to	+1100 Volts dc
Gid No. 2 voltage	550 Volts dc
Grid No. 1 Voltage	154 Wales da
Negative Bias Value	134 VOITS GC
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	200 Volts
neater Positive with Respect to Cathode	200 Volts
TYPICAL OPERATING CONDITIONS	
Anode Voltage	16,000 Volts dc
Anode Voltage	o +400 Volts dc
Grid No. 2 Voltage	300 Volts dc
Grid No. 1 Voltage Required for Cutoff <sup>3</sup> 35	s to -72 Volts dc
CIRCUIT VALUES	
Grid No. 1 Circuit Resistance	1.5 Megohms Max

### QUICK REFERENCE DATA

Television Picture Tube
24" Direct Viewed
Rectangular Glass Type
Lightweight Tube
Spherical Faceplate
Gray Filter Glass
Aluminized Screen
Electrostatic Focus
110° Magnetic Deflection
11/8" Neck Diameter
No Ion Trap
External Conductive Coating





## SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE DIVISION
SENECA FALLS, NEW YORK

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

NOVEMBER, 1957

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### SYLVANIA

### **24AMP4**

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#### NOTES:

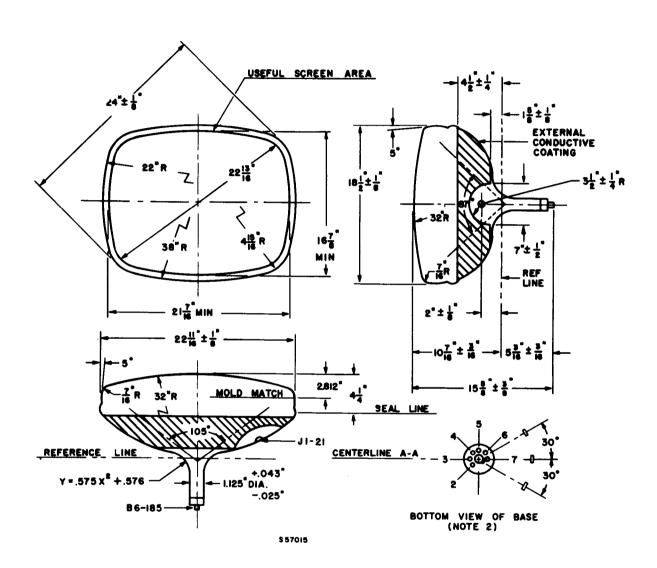
- 1. Heater warm-up time is defined as the time required for the voltage across the heater to reach 80% of its rated value after applying four (4) times rated heater voltage to a circuit consisting of the tube heater in series with a resistance equal to three (3) times rated heater voltage divided by rated heater current.
- 2. External conductive coating must be grounded.
- 3. Visual extinction of focused raster. Extinction of stationary focused spot will require that these values be about 5 volts more negative.

#### **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.

### **24AMP4**

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#### **DIAGRAM NOTES:**

- 1. Reference line is determined by plane C-C of JETEC No. 126 Reference Line Gauge, when the gauge is seated against the bulb.
- 2. Base pin No. 7 aligns with horizontal centerline within 30°, and is on same side as anode contact (11-21).