

# engineering data service

## 17VD*A*

SYLVANIA

#### CHARACTERISTICS

GENERAL DATA	
Focusing Method Magnetic	
Deflecting Method Magnetic	
Deflecting Angle (approx.)	
Horizontal	
Phosphor	
Fluorescence White	
Persistence Medium	
Faceplate Gray Filter Glass	
Light Transmittance (approx.)	
ELECTRICAL DATA	
Heater Voltage 6.3 Volts	
Heater Voltage	
Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	
Cathode to All Other Electrodes	
External Conductive Coating to Anode 2 700 μμι Max. 500 μμf Min.	•
Ion Trap Magnet External, Single Field Type	
MECHANICAL DATA	
Minimum Useful Screen Dimensions 10 <sup>3</sup> / <sub>4</sub> x 14½ Inches	
Bulb Contact, (Recessed Small Cavity Cap) I1-21	
Bulb Contact, (Recessed Small Cavity Cap)	
Basing	
RATINGS	
MAXIMUM RATINGS (Design Center Values)	
Anode Voltage	
Grid No. 2 Voltage 500 Volts dc	
Grid No. 1 Voltage	
Negative Bias Value	
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 410 Volts dc	
After Equipment Warm-up Period 150 Volts dc	
Heater Positive with Respect to Cathode 150 Volts dc	
RECOMMENDED OPERATING CONDITIONS	
Anode Voltage <sup>2</sup> 16,000 Volts dc	
Grid No. 2 Voltage	
Grid No. 1 Voltage <sup>3</sup> Required for Cutoff33 to -77 Volts dc	
Focusing Coil Current (approx.) 4	
CIRCUIT VALUES	
	<b>)</b>
	LVL
NOTES:	
1. External conductive coating must be grounded.	

2. Brilliance and definition decrease with decreasing anode voltage. In general, the

4. For JETEC focusing coil 109 or equivalent three inches from reference line, bias

adjusted to 20 foot lamberts on a 103/4 x 141/4 inch picture area sharply focused at

anode voltage should not be less than this value.

3. Visual extinction of undeflected focused spot.

center of screen.

### ax.

### SYLVANIA ELECTRIC PRODUCTS INC.

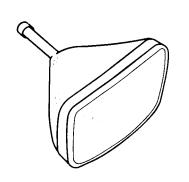
TELEVISION PICTURE TUBE DIVISION SENECA FALLS, NEW YORK

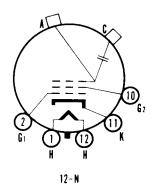
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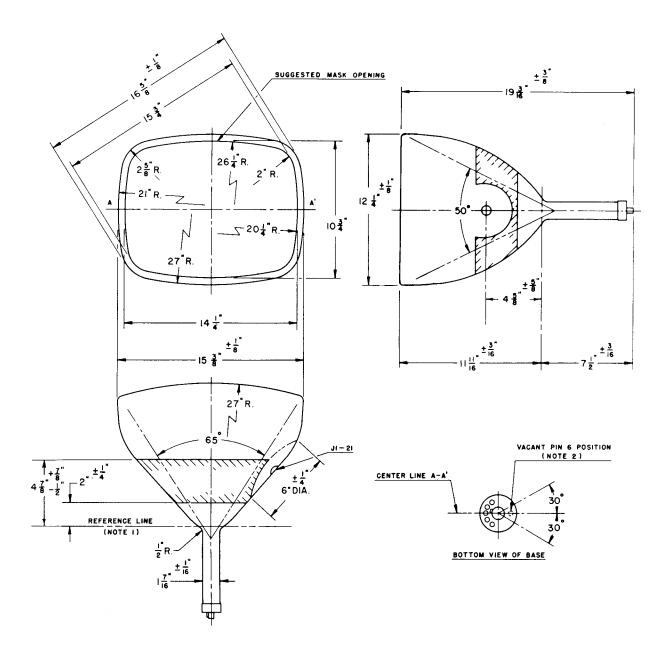
SEPTEMBER 1952

### QUICK REFERENCE DATA

Television Picture Tube 17" Direct Viewed Rectangular Glass Type Cylindrical Faceplate Gray Filter Glass Magnetic Deflection Magnetic Focus Single Field Ion Trap External Conductive Coating







### **DIAGRAM NOTES:**

- 1. Reference line is determined by the plane of the upper edge of the reference line gauge (RTMA No. 110) when the gauge is resting on the glass cone.
- 2. Anode aligns with pin position No. 6  $\pm$ 30 degrees.

#### **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.