

# engineering data service

17DCP4

from JETEC release #2284, Oct. 6, 1958

# ADVANCE DATA

# CHARACTERISTICS

#### GENERAL DATA

Focusing Method Electrostatic Deflection Method Magnetic Deflection Angles (Approx.) Horizontal 85 Degrees Diagonal 90 Degrees Phosphor Aluminized P4 Fluoresence White Persistence Short to Medium Faceplate Gray Filter Glass Light Transmittance (Approx.) 74 Percent

#### ELECTRICAL DATA

Heater Voltage 6.3 Volts Heater Current  $0.3 \pm 5\%$  Ampere Heater Warm-up Time 11 Seconds Direct Interelectrode Capacitance (Approx.) Cathode to All Other Electrodes 5 JIL Grid No. 1 to All Other Electrodes 6 µuf External Conductive Coating to Anode<sup>2</sup> Max. 1500 µµf 1000 HHf Min.

### MECHANICAL DATA

Minimum Useful Screen Dimensions
Minimum Useful Screen Area

Minimum Useful Screen Area

Bulb

Bulb Contact (Recessed Small Cavity Cap)

Base (Small Shell Duodecal 6-Pin)

Basing

Weight (Approx.)

14 5/16 x 11 1/8 Inches

149 Sq. Inches

136-63

B6-63

B6-63

Pounds

#### RATINGS

# MAXIMUM RATINGS (Absolute Maximum Values)

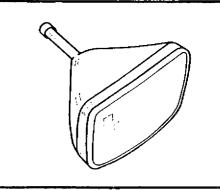
Heater Positive with Respect to Cathode

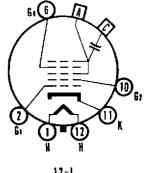
Anode Voltage Grid No. 4 Voltage	17,600	Volts	dc
(Focusing Electrode)	-550 to +1100	Volts	dc
Grid No. 2 Voltage	550	Volts	dc
Grid No. 1 Voltage			
Negative Bias Value	155	Volts	dc
Negative Peak Value	220	Volts	
Positive Bias Value	0	Volts	dc
Positive Peak Value	2	Volts	
Peak Heater-Cathode Voltage			
Heater Negative with Respect to Cathode			
During Warm-up Period Not to Exceed			
15 Seconds	450	Volts	
After Equipment Warm-up Period	200	Volts	

200 Volts

# QUICK REFERENCE DATA

Television Picture Tube
17" Direct Viewed
Rectangular Glass Type
Spherical Faceplate
Gray Filter Glass
Magnetic Deflection
Electrostatic Focus
No Ion Trap
External Conductive Coating
Aluminized Screen
6.3 Volt, 300 Ma Heater





12-1

SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE DIVISION SENECA FALLS, NEW YORK

Prepared and Released By The TECHNICAL PUBLICATIONS SECTION EMPORIUM, PENNSYLVANIA

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# SYLVANIA

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# TYPICAL OPERATING CONDITIONS

Anode Voltage	14.000 Volts	dc
Grid No. 4 Voltage	-50 to +300 Volts	dc
Grid No. 2 Voltage	300 Volts	đc
Grid No. 1 Voltage Required for Cutoff3	-35 to -72 Volts	dc

#### CIRCUIT VALUES

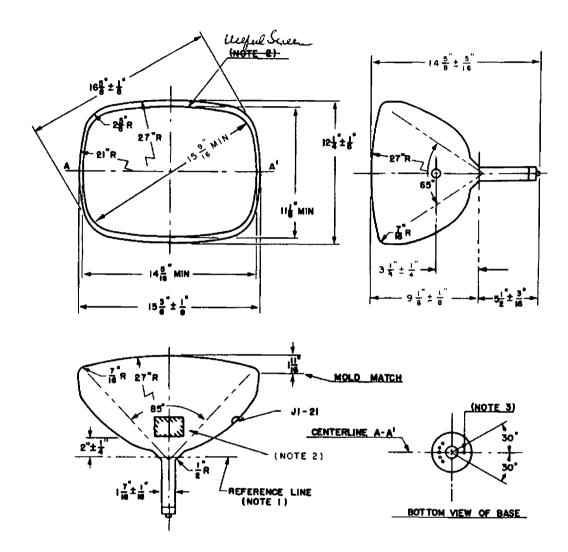
Grid No. 1 Circuit Resistance

1.5 Megohms Max.

#### 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.

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# DIAGRAM NOTES:

- 1. Reference line is determined by the plane C-C' of the Reference Line Gauge (JETEC No. 116) when the gauge is seated on the glass cone.
- 2. Contact area for external conductive coating 2" x 2", located 90 degrees counterclockwise from anode contact as viewed from base end of tube.
- 3. Anode contact aligns with pin position No. 6 ± 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.