

engineering data service

SYLVANIA

21DQP4

ADVANCE DATA

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic	
Deflection Method	Magnetic	
Deflection Angles (approx.)		
Horizontal	85	Degrees
Diagonal	90	Degrees
Phosphor	Aluminized P4	
Fluorescence	Wh i te	
Persistence	Short to Medium	
Faceplate	Gray Filter Glass	
Light Transmittance (approx.	74	Percent

FLECTRICAL DATA

Heater Voltage	6.3	Volt	ន
Heater Current 0.6	± 5%	Ampe	re
Heater Warm-up Timel	11	Seco	nd s
Direct Interelectrode Capacitances (approx.)		
Cathode to All Other Electrodes	5	$\mu\mu f$	
Grid No. 1 to All Other Electrodes	6	$\mu\mu f$	
External Conductive Coating to Anode2	2500	uuf	Max.
•	2000	иµf	Min.

MECHANICAL DATA

Minimum Useful Screen Dimensions Minimum Useful Screen Area Bulb Bulb Contact (Recessed Small	J171D or J171E	Inches Sq. Inches
Base (Small Shell Duodecal 6-Pir Basing Weight (approx.)	1) B6-63 or B6-203 12L 22 1/2	Pounds

RATINGS

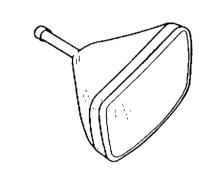
MAXIMUM RATINGS (Absolute Maximum Values)

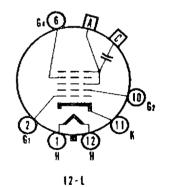
20,000	Volts	dc
EEO 10 11100	₩-7+-	. د
7,70	ACTOR	uc
155	Volts	de
220	Volts	
0	Volts	dc
2	Volts	
	-550 to +1100 550 155 220 0	20,000 Volts -550 to +1100 Volts 550 Volts 155 Volts 220 Volts 0 Volts 2 Volts

from JETEC release #2161, April 14, 1958

QUICK REFERENCE DATA

Television Picture Tube
21" Direct Viewed
Rectangular Glass Type
Spherical Faceplate
Gray Filter Glass
Electrostatic Focus
No Ion Trap
90° Magnetic Deflection
External Conductive Coating
Aluminized Screen
5 Inch Neck Length





SYLVANIA ELECTRIC PRODUCTS INC.

TELEVISION PICTURE TUBE DIVISION

SENECA FALLS, NEW YORK

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MAXIMUM RATINGS (Absolute Maximum Values) (Cont'd)

Peak Heater-Cathode Voltage
Heater Negative with Respect to Cathode
During Warm-up Period Not to Exceed
15 Seconds
After Equipment Warm-up Period

Heater Positive with Respect to Cathode

450 Volts 200 Volts 200 Volts

TYPICAL OPERATING CONDITIONS

Anode Voltage	16,000	Volts	dc
Grid No. 4 Voltage	~50 to +350	Volts	dc
Grid No. 2 Voltage	300	Volts	dc
Grid No. 1 Voltage Required for Cutoff3	-35 to -72	Volts	đc

CIRCUIT VALUES

Grid No. 1 Circuit Resistance

1.5 Megohms Max.

NOTES:

- 1. Heater warm-up time is the time required for the voltage across the heater terminals to increase to 5.0 volts in the JETEC test circuit, with E=25 volts and series R=31.5 ohms.
- 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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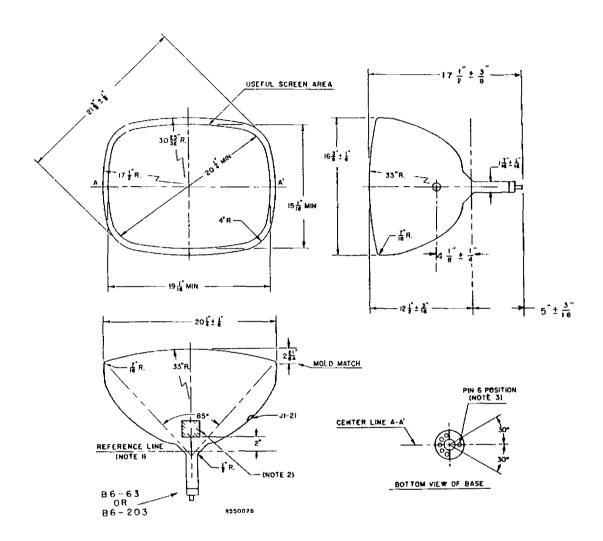


DIAGRAM NOTES:

- 1. Reference line is determined by the plane C-C' of JETEC No. 116 reference line gauge when the gauge is seated against the glass cone.
- 2. Contact area for external conductive coating, 2" X 2", located 90° counterclockwise from anode contact as viewed from base end of tube.
- 3. Pin position No. 6 aligns with horizontal centerline within 30° and is on same side as anode contact (J1-21).

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.