

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Electrostatic
Type*	3MP1
Fluorescence	Green
Phosphorescence	—
Persistence	Medium
Faceplate	Clear, Spherical

*In addition to the type shown, the 3MP- can be supplied with several other screen phosphors

ELECTRICAL DATA

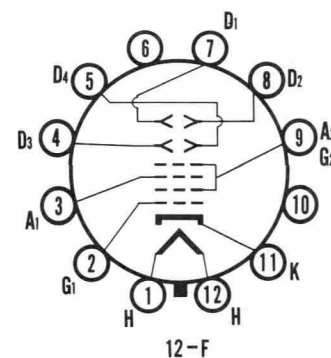
Heater Voltage	6.3 Volts
Heater Current	$0.6 \pm 10\%$ Ampere
Direct Interelectrode Capacitances (approx.)	
Cathode to All Other Electrodes	2.2 μmf
Grid to All Other Electrodes	10.3 μmf
Between Deflecting Plates 1-2	1.3 μmf
Between Deflecting Plates 3-4	1.2 μmf
Deflecting Plate 1 to All Other Electrodes Except D2	4.4 μmf
Deflecting Plate 2 to All Other Electrodes Except D1	5.6 μmf
Deflecting Plate 3 to All Other Electrodes Except D4	5.0 μmf
Deflecting Plate 4 to All Other Electrodes Except D3	4.5 μmf

MECHANICAL DATA

Minimum Useful Screen Diameter	2 $\frac{3}{4}$ Inches
Bulb	J24P
Base (Small Shell Duodecal 12-Pin)	B12-43
Basing	12F
Base Alignment	
D1-D2 Trace Aligns with Pin No. 4 and Tube Axis	± 10 Degrees
Positive Voltage on D1 Deflects Beam Approx. Toward Pin No. 4	
Positive Voltage on D3 Deflects Beam Approx. Toward Pin No. 1	
Angle Between D1-D2 and D3-D4 Traces	90 ± 3 Degrees
Weight (Approx.)	$\frac{1}{2}$ Pound

QUICK REFERENCE DATA

Oscilloscope Tube
3" Direct Viewed
Round Glass Type
Clear, Spherical Faceplate
Electrostatic Focus
Electrostatic Deflection



SYLVANIA ELECTRONIC TUBES

A Division of
Sylvania Electric Products Inc.

PICTURE TUBE OPERATIONS
SENECA FALLS, NEW YORK

Prepared and Released By The
TECHNICAL PUBLICATIONS SECTION
EMPORIUM, PENNSYLVANIA

MARCH, 1960

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File Under
SPECIAL AND GENERAL PURPOSE
CATHODE RAY TUBES

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode No. 2 Voltage	2750 Volts dc
Anode No. 1 Voltage (Focusing Electrode)	1100 Volts dc
Grid Voltage	
Negative Bias Value	220 Volts dc
Positive Bias Value	0 Volts dc
Positive Peak Value	2 Volts
Peak-Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	140 Volts
Heater Positive with Respect to Cathode	140 Volts
Peak Voltage Between Anode No. 2 and	
Any Deflection Plate	550 Volts

TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage ¹	2000 Volts dc
Anode No. 1 Voltage for Focus	400 to 700 Volts dc
Grid Voltage Required for Cutoff ²	0 to -126 Volts dc
Deflection Factor	
Deflection Plates 1-2 ³	230 to 290 Volts dc/Inch
Deflecting Plates 3-4 ⁴	220 to 280 Volts dc/Inch

CIRCUIT VALUES

Grid No. 1 Circuit Resistance	1.5 Megohms Max.
Deflection Circuit Resistance ⁵	5.0 Megohms Max.

NOTES:

1. Brilliance and definition decreases with decreasing Anode No. 2 Voltage. In general, Anode No. 2 Voltage should not be less than 1000 Volts.
2. Visual extinction of undeflected focused spot.
3. Deflecting Plates D1 and D2 are nearer the screen.
4. Deflecting Plates D3 and D4 are nearer the base.
5. It is recommended that the deflecting electrode circuit resistances be approximately equal.

OUTLINE

