

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Electrostatic
Phosphor	2BP1 2BP11
Fluorescence	Green Blue
Phosphorescence	—
Persistence	Medium Short
Faceplate	Clear

*In addition to the types shown, the 2BP- 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	
Grid to All Other Electrodes	8 μf
Between Deflecting Plates 1-2 ¹	2 μf
Between Deflecting Plates 3-4 ¹	2 μf
Deflecting Plate 1 to All Other Electrodes	9 μf
Deflecting Plate 2 to All Other Electrodes	7 μf
Deflecting Plate 3 to All Other Electrodes	7 μf
Deflecting Plate 4 to All Other Electrodes	7 μf

MECHANICAL DATA

Minimum Useful Screen Diameter	$1\frac{3}{4}$ Inches
Overall Length	$7\frac{5}{8} \pm \frac{3}{16}$ Inches
Bulb	J16A
Base (Small Shell Duodecal 10-Pin or 12-Pin)	B10-75 or B12-43
Basing	12E
Weight (Approx.)	$\frac{1}{4}$ Pound

With D1 positive with respect to D2, the spot is deflected toward Pin No. 4; with D3 positive with respect to D4, the spot is deflected toward Pin No. 1.

The plane through the tube axis and Pin No. 4 may vary from the trace produced by D1 and D2 by an angular tolerance (measured about the tube axis) of 10°

The angle between D1-D2 and D3-D4 traces is $90^\circ \pm 3^\circ$

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

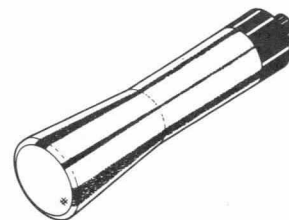
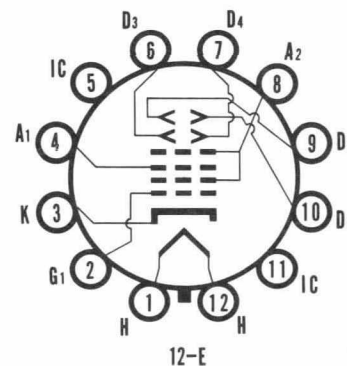
Anode No. 2 Voltage	2750 Volts	dc
Anode No. 1 Voltage	1100 Volts	dc
Grid Voltage		
Negative Bias Value	220 Volts	
Positive Peak Value	2 Volts	
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	140 Volts	
Heater Positive with Respect to Cathode	140 Volts	
Peak Voltage Between Anode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

TYPICAL OPERATING CONDITIONS

Anode No. 2 Voltage ²	1000	2000 Volts	dc
Anode No. 1 Voltage for Focus	150-280	300-560 Volts	dc
Max. Grid Voltage Required for Cutoff ³	-67.5	-135 Volts	dc
Deflection Factors:			
Deflecting Plates 1-2 ⁴	115 to 155	230 to 310 Volts	dc/Inch
Deflecting Plates 3-4 ⁵	74 to 100	148 to 200 Volts	dc/Inch
Spot Position (Undelected) ⁶		5 mm	

QUICK REFERENCE DATA

Oscilloscope Tube
2" Direct Viewed
Round Glass Type
Electrostatic Deflection
Electrostatic Focus



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, 1962

PAGE 1 OF 2

File Under

SPECIAL AND GENERAL
PURPOSE CATHODE RAY TUBES

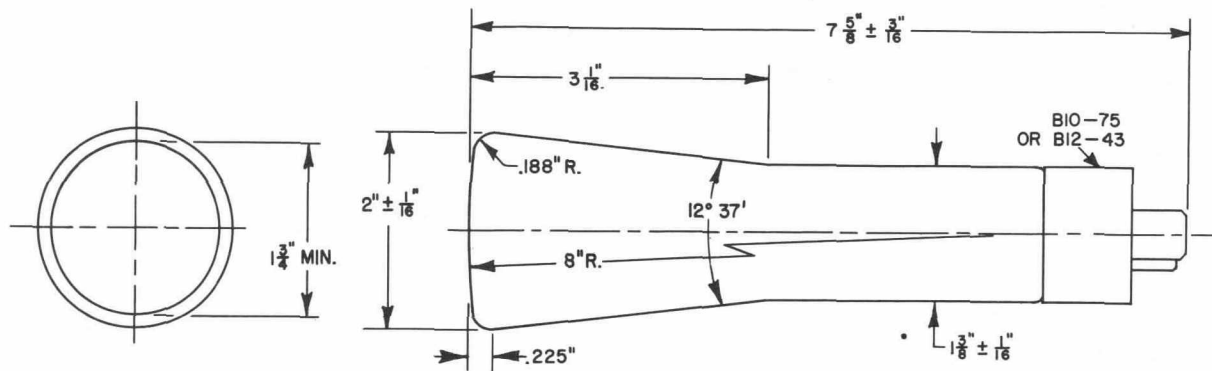
CIRCUIT VALUES

Grid Circuit Resistance	1.5 Megohms Max.
Deflection Circuit Resistance	5.0 Megohms Max.

NOTES:

1. Deflecting Plate 1 is Pin No. 10
Deflecting Plate 2 is Pin No. 9
Deflecting Plate 3 is Pin No. 6
Deflecting Plate 4 is Pin No. 7
2. Brilliance and definition decrease with decreasing Anode No. 2 Voltage. In general, Anode No. 2 Voltage should not be less than 500 volts.
3. Visual extinction of undeflected focused spot.
4. Deflecting Plates 1-2 are nearer the screen.
5. Deflecting Plates 3-4 are nearer the base.
6. The center of the undeflected, focused spot, will fall within a circle having a 5.0 mm radius concentric with the center of the tube face.

OUTLINE



S54012