



ELECTRONIC TUBE REFERENCE

5BPA

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Five-inch electrostatic oscilloscope and instrument cathode-ray tube designed for direct waveform display. Manufacturer documentation specifies the electron-optical system, screen characteristics, ratings, capacitances, and representative operating conditions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	11N	BASE PINS	11
NOMINAL HEATER	6.3 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	2200 V
<i>CRT highest published anode/accelerating voltage is promoted to MaxPlateVoltage; additional electrode, deflection, optical, and capacitance data are retained as parameters.</i>	

The 5BPA is a 5-inch cathode-ray tube described by Sylvania as a electrostatic oscilloscope CRT. Its supplied sheet specifies a 6.3 V heater, electrode/anode ratings, focus and deflection conditions, interelectrode capacitances, and a P1 green fluorescence, medium persistence screen.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Sylvania Electronic Tubes Vol3

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Cathode Ray

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 to all other electrodes capacitance	8 pF	—
Deflection plates 1-2 capacitance	1.3 pF	—
Deflection plates 3-4 capacitance	1.2 pF	—
Deflection plate 1 to all other electrodes capacitance	9.5 pF	—
Deflection plate 3 to all other electrodes capacitance	12 pF	—
Deflection plate 1 to all other electrodes except D2 capacitance	8 pF	—
Deflection plate 2 to all other electrodes except D1 capacitance	7.5 pF	—
Deflection plate 3 to all other electrodes except D4 capacitance	10 pF	—
Deflection plate 4 to all other electrodes except D3 capacitance	7.5 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum anode No. 2 voltage	2200 V	—
Maximum anode No. 1 voltage	1100 V	—
Maximum negative grid bias magnitude	125 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak voltage between anode No. 2 and any deflection plate	550 V	—
Typical anode No. 2 voltage	2000 V	—
Focus voltage range	315–562 V	—
Grid cutoff voltage range	-60--20 V	—
Deflection factor plates 1-2	70–98 V/in	—
Deflection factor plates 3-4	63–89 V/in	—

CIRCUITVALUE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 circuit resistance maximum	1.5 M0hm	—
Deflection circuit resistance maximum	5 M0hm	—