

Three-inch oscilloscope and instrument cathode-ray tube with electrostatic focusing and electrostatic deflection and a P1 screen. Manufacturer documentation supports compact waveform, measurement, and indicator-display service.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	3000 V
Published source values promoted where applicable; additional values retained as parameters.	

Sylvania 3BEP1 direct-view oscilloscope CRT with electrostatic focus/deflection; P1 green, medium persistence. Published maximum ratings, capacitances, and typical operating conditions were extracted from the supplied datasheet.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Electrostatic	—
Phosphor	P1	—



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.5 V	—
Heater Current	600 mA	—
FocusingMethod	Electrostatic	—
DeflectionMethod	Electrostatic	—
Phosphor	P1 green, medium persistence	—
MinimumUsefulScreen	1.5 x 3 in	—
Cathode To All Capacitance	6.5 pF	—
GridToAllCapacitance	7.5 pF	—
BetweenDeflectionPlates1_2Capacitance	1.6 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
BetweenDeflectionPlates3_4Capacitance	2.2 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode2VoltageMaximum	3000 V	—
Anode1FocusVoltageMaximum	1200 V	—
GridNegativeBiasMagnitudeMaximum	140 V	—
GridPositivePeakVoltageMaximum	2 V	—
PeakHeaterCathodeVoltageNegative	140 V	—
PeakVoltageAnode2ToDeflectionPlate	550 V	—
Anode2Voltage	1500 V	—
Anode1VoltageForFocus	247-465 V	—
GridVoltageForCutoff	-43.5 to -101 V	—
DeflectionFactorPlates1_2	109-149 V/in	—
DeflectionFactorPlates3_4	78-105 V/in	—
GridCircuitResistanceMaximum	1.5 Mohm	—
DeflectionCircuitResistanceMaximum	1 Mohm	—
AltitudeMaximum	70000 ft	—
OperatingTemperatureMinimum	-55 C	—
OperatingTemperatureMaximum	85 C	—