

ELECTRONIC TUBE REFERENCE

3KP11

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Three-inch cathode-ray tube for oscilloscope and instrument display service, using electrostatic focusing and electrostatic deflection. Its P11 screen designation identifies the phosphor variant within this compact oscillographic family.

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	2500 V
MAXIMUM SCREEN VOLTAGE	500 V
3KP1 electrical family with P11 short-persistence phosphor.	

Sylvania 3KP11 direct-view oscilloscope CRT with electrostatic focus/deflection; P11 blue, short persistence. Published maximum ratings, capacitances, and typical operating conditions were extracted from the supplied datasheet.



SOURCE OPERATING CONDITIONS

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Phosphor	P11	—
Focusing Method	Electrostatic	—
Deflecting Method	Electrostatic	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode No. 2 Voltage	2750 V	—
Typical Anode No. 2 Voltage	2000 V	—



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	6.3 V	—
Heater Current	600 mA	—
FocusingMethod	Electrostatic	—
DeflectionMethod	Electrostatic	—
Phosphor	P11 blue, short persistence	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MinimumUsefulScreen	2.75 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode2VoltageMaximum	2750 V	—
Anode1FocusVoltageMaximum	1100 V	—
GridNegativeBiasMagnitudeMaximum	200 V	—
GridPositivePeakVoltageMaximum	2 V	—
PeakHeaterCathodeVoltageNegative	140 V	—
PeakVoltageAnode2ToDeflectionPlate	550 V	—
Anode2Voltage	2000 V	—
Anode1VoltageForFocus	320-600 V	—
GridVoltageForCutoff	-38 to -90 V	—
DeflectionFactorPlates1_2	100-136 V/in	—
DeflectionFactorPlates3_4	76-104 V/in	—
GridCircuitResistanceMaximum	1.5 Mohm	—
DeflectionCircuitResistanceMaximum	5 Mohm	—
Anode2PowerInputMaximum	6 W	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 1 of 7

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

1971 RCA HB3 BINDER 1 OF 7

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	600 mA	—
Peak heater-cathode voltage, heater negative	125 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum deflecting electrode voltage	500 V	—
Focusing electrode voltage minimum	160 V	Typical
Focusing electrode voltage maximum	600 V	Typical

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Electrostatic	—
Phosphor	P11	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Fluorescence	Blue	—
Persistence	Short	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1 to all other electrodes capacitance	8 pF	Approximate

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Oscilloscope/cathode-ray display	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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