



ELECTRONIC TUBE REFERENCE

3JP7

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Small electrostatically focused and deflected P7 cathode-ray instrument tube for oscillograph and waveform display, with a 6.3 V heater and phosphor persistence appropriate to the P7 screen.

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

SECTION 1 Cathode Ray	
MAXIMUM PLATE VOLTAGE	4000 V
MAXIMUM SCREEN VOLTAGE	500 V
<i>3JP1 electrical family with P7 long-persistence phosphor.</i>	

The Du Mont 3JP7 is a short high-light-output oscillographic CRT with intensifier electrode and high-current gun. This variant uses a P7 screen with blue/blue-white fluorescence and long persistence.



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Electrostatic	—
Phosphor	P7	—



SOURCE OPERATING CONDITIONS

1960 Du Mont

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

1960 DU MONT

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—
Focusing Method	Electrostatic text	—
Deflection Method	Electrostatic text	—
Phosphor	P7 text	—
Fluorescence	Blue/blue-white text	—
Persistence	Long text	—
Post-Acceleration	Present text	—

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	P7 blue-white/yellow, long persistence	—
MinimumUsefulScreen	2.75 in	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode3VoltageMaximum	6000 V	—
Anode2VoltageMaximum	2200 V	—
Anode1FocusVoltageMaximum	1100 V	—
GridNegativeBiasMagnitudeMaximum	200 V	—
GridPositivePeakVoltageMaximum	2 V	—
PeakHeaterCathodeVoltageNegative	140 V	—
PeakVoltageAnode2ToDeflectionPlate	550 V	—
Anode3Voltage	4000 V	—
Anode2Voltage	2000 V	—
Anode1VoltageForFocus	400-700 V	—
GridVoltageForCutoff	-40 to -90 V	—
DeflectionFactorPlates1_2	180-220 V/in	—
DeflectionFactorPlates3_4	130-170 V/in	—
GridCircuitResistanceMaximum	1.5 Mohm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DeflectionCircuitResistanceMaximum	5 Mohm	—



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	—
Anode No.3 post-deflection accelerator voltage	4000 V	—
Anode No.2 voltage	2000 V	—
Maximum deflecting electrode voltage	500 V	—
Maximum deflecting-electrode circuit resistance	5 megohm	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing method	Electrostatic	—
Deflection method	Electrostatic	—
Phosphor	P7	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Fluorescence	Bluish fluorescence / greenish-yellow phosphorescence	—
Persistence	Long	—

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

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

TUBE TINKER

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