



ELECTRONIC TUBE REFERENCE

7AYP1

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Seven-inch P1 cathode-ray instrument tube for oscillographic or measurement display, with manufacturer-specified focusing, deflection, accelerating-voltage, and phosphor characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	12
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	8000 V
<i>Electrostatic oscilloscope CRT; post-accelerator max 16000 V.</i>	

Sylvania seven-inch CRT with electrostatic focus, electrostatic deflection, and P1 green, medium persistence. Published electrical ratings, capacitances, and 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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	600 mA	Nominal
PostAcceleratorVoltage	10000 V	Oscilloscope



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	P1 green, medium persistence	—
MinimumUsefulScreen	4.75 x 5.75 in	—
DeflectionFactorUniformityMaximum	3 %	—
LineWidthMaximum	0.3 mm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1CircuitResistanceMaximum	1.5 Mohm	—
PostAcceleratorVoltageMaximum	16000 V	—
AnodeVoltageMaximum	8000 V	—
PostAcceleratorToAnodeVoltageRatioMaximum	2	—
FocusElectrodeVoltageMaximum	2500 V	—
Grid1NegativeBiasMagnitudeMaximum	200 V	—
HeaterCathodeVoltageMaximum	180 V	—
PeakVoltageAnodeToDeflectionPlate	1500 V	—
PostAcceleratorVoltage	10000 V	—
Anode Voltage	5000 V	—
FocusElectrodeVoltage	1375 to 1875 V	—
Grid1VoltageForCutoff	-50 to -90 V	—
DeflectionFactorD1D2	125 to 150 V/in	—
DeflectionFactorD3D4	100 to 125 V/in	—
DeflectionCircuitResistanceMaximum	3 Mohm	—