



ELECTRONIC TUBE REFERENCE

7AEP7

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Seven-inch P7 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	—
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	8800 V
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Published Sylvania CRT voltage ratings, capacitances, focusing/deflection, and typical operating conditions extracted.

Sylvania seven-inch CRT with electrostatic focus, electrostatic deflection, and P7 blue-white/yellow, long persistence. Published electrical ratings, capacitances, and operating conditions were extracted from the supplied datasheet.

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	6.25 in	—
PatternDistortionMaximum	2.5 %	—
DeflectionFactorUniformityMaximum	3 %	—
ModulationMaximum	37 V	BeamCurrent=25uA
LineWidthMaximum	0.022 in	BeamCurrent=25uA

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid1CircuitResistanceMaximum	1.5 Mohm	—
Anode3VoltageMaximum	8800 V	—
Anode2VoltageMaximum	4400 V	—
Anode3ToAnode2VoltageRatioMaximum	2	—
Anode1FocusVoltageMaximum	1375 V	—
Grid1NegativeBiasMagnitudeMaximum	220 V	—
HeaterCathodeVoltageMaximum	200 V	—
PeakVoltageAnode2ToDeflectionPlate	825 V	—
Anode3Voltage	4000 V	—
Anode2Voltage	2000 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode1VoltageForFocus	380 to 620 V	—
Grid1VoltageForCutoff	-45 to -75 V	—
DeflectionFactorD1D2	81 to 101 V/in	—
DeflectionFactorD3D4	67 to 83 V/in	—

TUBE TINKER

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

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