

ELECTRONIC TUBE REFERENCE

23AFP4

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
CATHODERAY

Large P4 monochrome television picture tube for high-voltage direct-view service, using magnetic deflection and manufacturer-specified focusing and beam-control arrangements for type 23AFP4.

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	22000 V
Direct-view CRT; maximum anode voltage promoted. Source warns of possible X-radiation exposure above specified voltage conditions.	

The Sylvania 23AFP4 is a 23-inch aluminized P4 television cathode-ray tube with electrostatic focus and magnetic deflection.



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
Phosphor	P4	—
Deflection method	Magnetic	—
Focusing method	Electrostatic	—



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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—
Heater Warm-up Time	11 s	—
Focusing Method	Electrostatic text	—
Deflection Method	Magnetic text	—
Horizontal Deflection Angle	81 deg	Approximate
Vertical Deflection Angle	66 deg	Approximate
Diagonal Deflection Angle	92 deg	Approximate
Phosphor	Aluminized P4 text	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Fluorescence	White text	—
Persistence	Short to Medium text	—
Light Transmittance	40 percent	Approximate
Cathode-to-All Capacitance	5 pF	Approximate
Grid1-to-All Capacitance	6 pF	Approximate
External Coating-to-Anode Capacitance Minimum	2000 pF	—
External Coating-to-Anode Capacitance Maximum	2500 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	22000 V	—
Minimum Anode Voltage	12000 V	—
Maximum Grid2 Voltage	550 V	—
Maximum Heater-Cathode Voltage During Warmup	450 V	Duration<=15s
Maximum Heater-Cathode Voltage After Warmup	200 V	—
Typical Anode Voltage	16000 V	—
Typical Grid2 Voltage	300 V	—
Focus Voltage Minimum	-550 V	—
Focus Voltage Maximum	1100 V	—
Cutoff Voltage Minimum	-72 V	—
Cutoff Voltage Maximum	-35 V	—
Maximum Grid1 Circuit Resistance	1.5 Mohm	—
Drive Mode	Grid Drive text	—

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

