

ELECTRONIC TUBE REFERENCE

12SP7D

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Twelve-inch P7 long-persistence radar-indicator cathode-ray tube with magnetic focusing and deflection. Its aluminized gray-filter screen gives blue-white fluorescence with yellow afterglow, and the anode is rated to about 15 kV.

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	15000 V
Published maximum ratings and characteristics promoted semantically from the approved source.	

The Sylvania 12SP7D is a 12-inch P7 long-persistence radar-indicator cathode-ray tube with magnetic focus and deflection.



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

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	15000 V	—
Typical Anode Voltage	9000 V	—

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Phosphor	P7	—
Focusing Method	Magnetic	—
Deflecting Method	Magnetic	—



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	—
Focusing Method	Magnetic text	—
Deflection Method	Magnetic text	—
Fluorescence	Blue-White text	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Persistence	Long text	—
Phosphorescence	Yellow text	—
Deflection Angle	54 deg	Approximate
Screen Aluminized	Yes text	—
Faceplate	Gray Filter Glass text	—
Maximum Undelected Spot Radius	20 mm	—
Light Transmittance	74 percent	Approximate

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	15000 V	—
Maximum Grid2 Voltage	770 V	—
Maximum Grid1 Negative Bias	200 V	—
Maximum Grid1 Positive Peak	2 V	—
Maximum Heater-Cathode Voltage	200 V	EitherPolarity
Anode Voltage	9000 V	—
Grid2 Voltage	250 V	—
Grid1 Cutoff Voltage Minimum	-63 V	—
Grid1 Cutoff Voltage Maximum	-27 V	—
Focusing Coil Current	110 mA	Approximate
Maximum Grid1 Circuit Resistance	1.5 Mohm	—

TUBE TINKER

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

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