



ELECTRONIC TUBE REFERENCE

17AVP4A

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

P4 cathode-ray display tube documented for high-voltage direct-view operation, using magnetic deflection and manufacturer-specified beam focusing and control arrangements appropriate to type 17AVP4A.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12L	BASE PINS	6
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	17600 V
MAXIMUM SCREEN VOLTAGE	550 V
<i>CRT-specific anode, focus, deflection and optical data retained as parameters rather than forced into ordinary plate/screen fields.</i>	

17AVP4A is a direct-view cathode-ray picture tube designed for television service. It uses electrostatic focusing and magnetic deflection, with a P-4 white picture screen. The datasheet publishes high-voltage anode operation, grid-electrode ratings, heater-cathode limits, deflection data, and operating characteristics. It uses ion-trap system.



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	600 mA	—
Cathode To All Other Electrodes Capacitance	5 pF	Approximate

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	17600 V	—
Maximum Grid2 Voltage	550 V	—
Typical Anode Voltage	14000 V	—



SOURCE OPERATING CONDITIONS

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Anode Voltage	16000 V	—
Typical Anode Voltage	12000 V	—
Maximum Grid2 Voltage	500 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Grid2 Voltage	300 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
FocusingMethod	LowVoltageElectrostatic	—
DeflectingMethod	Magnetic	—
DiagonalDeflectionAngleApproximate	90 degree	—
PhosphorNumber	4	—
FluorescentColor	White	—
Persistence	Medium	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 4 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 4 OF 4

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum DC grid 2 voltage	500 V	—
Maximum DC grid 4 voltage	-500–1000 V	—
Maximum grid 1 negative-bias voltage	125 V	NegativeBias
Maximum grid 1 positive-bias voltage	0 V	PositiveBias
Maximum grid 1 positive-peak voltage	2 V	PositivePeak
Peak heater-cathode voltage	410 V	HeaterNegativeWarmup
Peak heater-cathode voltage	180 V	HeaterNegativeAfterWarmup
Peak heater-cathode voltage	180 V	HeaterPositive
DC anode voltage	12000 V	TypicalOperation
DC grid 4 voltage	-48–264 V	TypicalOperation

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC grid 2 voltage	300 V	TypicalOperation
DC grid 1 voltage	-33--77 V	TypicalOperation
Ion trap current	30 mA	Approximate

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Horizontal deflection angle	85 degrees	Approximate
Vertical deflection angle	68 degrees	Approximate
Diagonal deflection angle	90 degrees	Approximate

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to all other electrodes capacitance	5 pF	Approximate
Grid 1 to all other electrodes capacitance	6 pF	Approximate
External conductive coating to anode capacitance	1500 pF	Maximum
External conductive coating to anode capacitance	750 pF	Minimum


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AnodeVoltageMaximum	16000 V	—
AnodeVoltageTypical	14000 V	—
Grid2VoltageMaximum	500 V	—



TUBE TINKER

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and their source documents.

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