

ELECTRONIC TUBE REFERENCE

21AWP4A

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
CATHODERAY

Large P4 monochrome television picture tube documented for high-voltage direct-view service, using magnetic deflection and manufacturer-specified focusing and beam-control arrangements for type 21AWP4A.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12N	BASE PINS	5
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	20000 V
Cathode-ray electron-gun/screen system; anode/ultor maximum promoted to MaxPlateVoltage when explicitly published. Explicit X-ray warning/precaution or X-radiation characteristic is present in the supplied source.	

21AWP4A is a monochrome cathode-ray picture tube for television/display service. The supplied RCA data describes magnetic focusing and magnetic deflection, with a P4 phosphor screen and a published maximum anode/ultor voltage of 20000 V.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

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Section 1 · Cathode Ray

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	Nominal heater voltage
Heater Current	600 mA	Nominal heater current
Phosphor	P4	Published phosphor designation
External conductive coating to anode	2500 pF	External conductive coating to anode 2500 max. pf
Anode Voltage	20000 V	Anode Voltage 20000 max. volts
Grid-No.2 Voltage	550 V	Grid-No.2 Voltage 550 max. volts
Heater Voltage r6.9 max. volts	9 V	Heater Voltage r6.9 max. volts
After equipment warm-up period	200 V	After equipment warm-up period 200 max. volts
Combined AC and DC voltage	200 V	Combined AC and DC voltage 200 max. volts
Anode Voltage	18000 V	Anode Voltage 18000 volts
Grid-No.2 Voltage	400 V	Grid-No.2 Voltage 400 volts
focused raster	36–78 V	focused raster 36 to 78 volts
Grid-No.1-Circuit Resistance	1.5 MΩ	Grid-No.1-Circuit Resistance 1.5 max. megohms

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Focusing Method	Magnetic	Published focusing method
Deflection Method	Magnetic	Published deflection method

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAGNETIC FOCUS	72 deg	MAGNETIC FOCUS 72° MAGNETIC DEFLECTION

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode to all other electrodes	5 pF	Cathode to all other electrodes 5 pf
Grid No,1 to all other electrodes	6 pF	Grid No,1 to all other electrodes 6 pf
Heater Current at	30 mA	Heater Current at 6.3 volts 600 ± 30 ma
Heater Warm-up time (Average)	11 s	Heater Warm-up time (Average) 11 seconds
Projected Area of Screen	262 sq in	Projected Area of Screen 262 sq. in.

TUBE TINKER

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