



ELECTRONIC TUBE REFERENCE

23HGP4

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Large aluminized P4 monochrome television picture tube for high-voltage direct-view service, using electrostatic focusing and magnetic deflection with manufacturer-specified operating characteristics for type 23HGP4.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 20 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray	
MAXIMUM SCREEN VOLTAGE	550 V
<i>CRT-specific ratings, operating conditions, capacitances, focus/deflection, cutoff, optical, and screen data are retained in section parameters.</i>	

Direct-view cathode-ray picture tube for television display service, using electrostatic focus and magnetic deflection. The supplied datasheet was used for heater data, electrode ratings, focus and deflection information, capacitances, optical data, screen characteristics, and applicable operating limits.

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.

1971 RCA HB3 BINDER 1 OF 7

Section 1 · Cathode Ray

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
1 10° MAGNETIC DEFLECTION – published value 1	1 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
1 10° MAGNETIC DEFLECTION – published value 2	10 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid No.1 to all other electrodes	6 pF	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
External conductive coating to anode. . I 700 min-2500 max – published value 1	700 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
External conductive coating to anode. . I 700 min-2500 max – published value 2	2500 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
,.+~ – published value 1	6.3 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
,.+~ – published value 2	450 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
,.+~ – published value 3	20 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Light transmission at center (Approx)	42	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Projected Area of Screen	282	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
P i n 1- Heater	1	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.2 Voltage – published value 1	200 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.2 Voltage – published value 2	550 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Neater Voltage – published value 1	5.7 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Neater Voltage – published value 2	6.9 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Combined AC & DC voltage	200 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Anode Voltage	18000 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.4 Voltageb	200 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.2 Voltage	300 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Cathode Voltage – published value 1	28 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Cathode Voltage – published value 2	62 V	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.1 Circuit Resistance	1.5 mA	Published CRT datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

TUBE TINKER

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

