



ELECTRONIC TUBE REFERENCE

4510

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Oscillograph cathode-ray tube for waveform and instrumentation display with post-deflection acceleration. The additional acceleration increases trace brightness while maintaining electrostatic control for accurate measurement presentation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	10
NOMINAL HEATER	6.9 V / 6 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Cathode Ray

No fixed ratings recorded.

CRT-specific electrode voltages, deflection factors, capacitances, focus/cutoff data, and other published electrical values are stored as section parameters because the promoted section columns are primarily conventional valve fields.

Oscillograph cathode-ray tube for waveform and instrumentation display. The supplied datasheet was used for heater data, electrode ratings, focus and deflection information, capacitances, screen/phosphor characteristics, and applicable operating limits.

SOURCE OPERATING CONDITIONS
[SOURCE PDF](#)

1971 RCA HB3 Binder 1 of 7

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
5-Inch Diameter	5	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater Current at 6.3 V – published value 1	6.3	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater Current at 6.3 V – published value 2	6	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.1 to al l other electrodes	10 pF	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 1 -Heater	1	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 2 -Grid No.1	2	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 5 -Grid No.3	5	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 7- Deflecting Electrode DJ4 ACCELERATOR	7	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 8-Anode, Grid No.2	8	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 12 -Heater	12	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
1Grid No.5&collector)	1	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Post-Deflection Accelerator Voltage	3000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Voltage	1500 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.3 (Focusing-Electrode) Voltage 475 to 725 – published value 1	475 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.3 (Focusing-Electrode) Voltage 475 to 725 – published value 2	725 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No. 1 Voltage – published value 1	-40 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No. 1 Voltage – published value 2	-94 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
with respect to DJ4, the spot will be deflected toward pin 1	1	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Post-Deflection Accelerator Voltage	6000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Voltage	3000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.3 (Focusing-Electrode) Voltage	1200 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater Voltage	6.9 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater negative with respect to cathode	125 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater positive with respect to cathode	125 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No. 1-Circuit Resistance	1.5 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Resistance in any Deflection Electrode Circuits	5 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

TUBE TINKER

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