

ELECTRONIC TUBE REFERENCE

4547

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Cathode-ray tube intended for electronic visual-display service, using a high-voltage screen system and controlled beam deflection. The available manufacturer data supports a general electronic-display function but not a narrower application category.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Cathode Ray
<p>No fixed ratings recorded.</p> <p>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.</p>

Cathode-ray display tube for electronic visual-display service. 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
Voltage (AC or DC) – published value 1	6.3 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Voltage (AC or DC) – published value 2	10 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Voltage (AC or DC) – published value 3	6.3 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Voltage (AC or DC) – published value 4	10 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
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.
Current at 6.3 V – published value 2	0.6	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Current at 6.3 V – published value 3	0.6	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collector (Grid No.5) – published value 1	180	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collector (Grid No.5) – published value 2	300	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collimator (Grid No.4) – published value 1	40 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
Collimator (Grid No.4) – published value 2	150 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3e – published value 1	10	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3e – published value 2	150	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.2	150	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.1 – published value 1	-100	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.1 – published value 2	0	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater – published value 1	-125	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater – published value 2	125	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3f – published value 1	0	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3f – published value 2	1200	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.tf	-200	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heaterf – published value 1	-125	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heaterf – published value 2	125	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Screen Voltage	8500 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Backplate Voltage	0 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collector (Grid No.5)	200	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collimator) (Grid No.4) – published value 1	60 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Collimator) (Grid No.4) – published value 2	110 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.31 – published value 1	10	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.31 – published value 2	60	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.21	110	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid Na.11 – published value 1	-40	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid Na.11 – published value 2	0	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3k – published value 1	-2075	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.3k – published value 2	1575	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Luminance (Brightness)lp – published value 1	700	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Luminance (Brightness)lp – published value 2	1300	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Screen Currenttp – published value 1	300	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Current _{tp} – published value 2	750	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Viewing Gun Collector Current _{tt} – published value 1	1 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Viewing Gun Collector Current _{tt} – published value 2	2.4 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Viewing Gun Cathode Current _{tu} – published value 1	2.5 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Viewing Gun Cathode Current _{tu} – published value 2	4 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Writing Gun Cathode Current _{tu} – published value 1	2.5 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Writing Gun Cathode Current _{tu} – published value 2	5 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
or erasing) from zero brightness (viewing-beam cutoff) to 10% of	10	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
4. Do not apply excessive writing-beam current density	4	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
7. Apply voltages to tube in correct order	7 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
9. Stay within recommended viewing-grid voltage ranges	9 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Note 7	7	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 1: Grid No.2	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.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 3: Heater	3	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 4: Heater	4	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 1: Grid No.t	1	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
€~ Pin 2: Heater	2	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 8: Grid No.3	8	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
m The maximum bias-voltage value for writing-beam cutoff is -130	-130 V	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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