

ELECTRONIC TUBE REFERENCE

4557

Specialized - Cathode Ray electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

CATHODERAY

Twelve-inch rectangular cathode-ray tube with approximately 70-degree magnetic deflection for electronic visual-display service. Manufacturer data supports general monitor/display use without establishing a narrower television, radar, or oscilloscope role.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	6
NOMINAL HEATER	6.3 V / 6 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 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.

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
12"-Rectangular 70° - Magnetic Deflection – published value 1	12 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
12"-Rectangular 70° - Magnetic Deflection – published value 2	70 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater Current at 6.3 volts – 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.
Heater Current at 6.3 volts – published value 2	6 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid No.1 to all other electrodes	6 pF	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Light transmission at center (Approx.)	37	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Voltage	12000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Current	100	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.2 Voltage	340 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Current – published value 1	70	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Current – published value 2	30	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.3 Current – published value 1	30	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.3 Current – published value 2	70	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
voltages as high as 16,000 volts, shielding of the 4557 – published value 1	16 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
voltages as high as 16,000 volts, shielding of the 4557 – published value 2	0 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
voltages as high as 16,000 volts, shielding of the 4557 – published value 3	4557 V	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 6: Grid No.3	6	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Pin 10: Grid No.2	10	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.
ANODE TO CATHODE VOLTAGE=12000 VOLTS	12000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
ANODE CURRENT•100 MICROAMPERES	100 uA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
SPOT SIZE ~ 0.010 INCH	0.01	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 VOLTAGE = 6.3 VOLTS	6.3 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
ANODE TO CATHODE VOLTAGE = 12000 VOLTS	12000 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
GRID No. 2 TO CATHODE VOLTS	2 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
GRID No. 1 TO CATHODE VOLTS	1 V	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
Anode Voltage – published value 1	16 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Anode Voltage – published value 2	0 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	2700 V	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Grid-No.2 Voltage	400 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	180 mA	Published CRT datasheet value; where a source row has several numbers they represent its separate limits or operating conditions.
Heater positive with respect to cathode	180 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.

TUBE TINKER

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