

Specialized multi-electrode beam tube for color-television demodulation, switching, and coincidence gating. Balanced outputs and multiple control electrodes enable signal comparison and gating.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 BeamSwitchingCommutator	
PLATE RESISTANCE	14000 Ω
AMPLIFICATION FACTOR	58
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	30 A
Published promoted values applied where applicable; additional ratings, characteristics, and operating data retained as parameters.	

Miniature type used for color-demodulator applications in color television receivers and a variety of other switching and gate applications. Outlines section, 6E; requires miniature 9-contact socket. Pin 5 should be connected directly to ground. The 6ME8 should be so located in the equipment that it is not subjected to stray magnetic fields. 9RU

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7

Section 1 · BeamSwitchingCommutator

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
BALANCED OUTPUT	9	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage (AC or DC)	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid No.1 to all except plates	7.5 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Either plate to all	6 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate No.1 to Plate No.2	0.4 pF	Published datasheet value; multiple values represent separate source-table limits or conditions.
both plates	4400	Published datasheet value; multiple values represent separate source-table limits or conditions.
+ plate-No.2 current)	14.5 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No.3 Current	0.7 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate-No.1 Supply Voltage	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Supply Voltage	75 V	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Grid-No.3 Supply Voltage	350 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No. 1 Supply Voltage	0 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Cathode Resistor	390	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate-No.2 Current with (Edj1) = 95 V	95	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage	6.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate-No. 1 Supply 'Voltage	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate-No.2 Supply Voltage	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No. 1 Supply Voltage	0 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Cathode Resistor	390	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 3 -Grid No.3	3	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 4 -Heater End B	4	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 5 -Heater End A,	5	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 6 -Grid No.1	6	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 7 -Grid No.2, Cathode	7	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 9 -Plate No.1 – published value 1	9	Published datasheet value; multiple values represent separate source-table limits or conditions.
Pin 9 -Plate No.1 – published value 2	9	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Plate Voltage, each plate	400 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
DC Grid-No.3 (Accelerating- Grid) Voltage Ec3	400 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Fo_Itive-bias vzl ~,~	0	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage (AC or DC) – published value 1	5.7 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Heater Voltage (AC or DC) – published value 2	6.9 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
Average Cathode Current	30 mA	Published datasheet value; multiple values represent separate source-table limits or conditions.
Grid-No.3 Input	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
Plate Dissipation, each plate	2	Published datasheet value; multiple values represent separate source-table limits or conditions.
For fixed-bias operation – published value 1	0	Published datasheet value; multiple values represent separate source-table limits or conditions.
For fixed-bias operation – published value 2	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
For fixed-bias operation – published value 3	1	Published datasheet value; multiple values represent separate source-table limits or conditions.
for cathode-bias operation – published value 1	0	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
for cathode-bias operation – published value 2	25	Published datasheet value; multiple values represent separate source-table limits or conditions.
b Defined as the total voltage change from 75 volts n ei char deflecting	75 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
plate-current balance of the 6ME8. To minimize this effect, the	6	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE No.2 CONNECTED TO PLATE No.1 4T SOCKET	4	Published datasheet value; multiple values represent separate source-table limits or conditions.
GRID-No.3 VOLTS =3 S0	3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No2 VOLTS=250 – published value 1	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No2 VOLTS=250 – published value 2	30 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No.1 VOLTS=250	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No.2 VOLTS=250	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No.1VOLTS=250	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
PLATE-No.2 VOLTS=250	250 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
GRID-No.3 VOLTS=350	350 V	Published datasheet value; multiple values represent separate source-table limits or conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltageb	30 V	Published datasheet value; multiple values represent separate source-table limits or conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
No.2 voltage (Edj2) = 95 V – published value 1	95 V	Published datasheet value; multiple values represent separate source-table limits or conditions.
No.2 voltage (Edj2) = 95 V – published value 2	1.3 V	Published datasheet value; multiple values represent separate source-table limits or conditions.



SOURCE DATA APPENDIX

1975 RCA RC30

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

1975 RCA RC30

Section 1 · BeamSwitchingCommutator

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	6.3 volts	Published value from supplied target entry
Heater Current	0.3 ampere	Published value from supplied target entry
Plate Voltage (Each Plate)	400 volts	Published value from supplied target entry
Peak Deflecting-Electrode Voltage (Each Electrode) ±	200 volts	Published value from supplied target entry
Deflecting-Electrode Voltage (Each Electrode)	100 volts	Published value from supplied target entry
Grid-No	400 volts	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 volts	Published value from supplied target entry
Cathode Current	30 mA	Published value from supplied target entry
Plate Dissipation (Each Plate)	2 watts	Published value from supplied target entry
Grid-No	2 watts	Published value from supplied target entry
Plate-No	260 volts	Published value from supplied target entry
Plate-No	250 volts	Published value from supplied target entry
Grid-No	350 volts	Published value from supplied target entry
Grid-No.1 Supply Voltage	0 volts	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Deflecting -Electrode- No	75 volts	Published value from supplied target entry
Deflecting-Electrode-No.1 Supply Voltage	75 volts	Published value from supplied target entry
Transconductance, Grid No.1 to both plates	4400	Published value from supplied target entry
Total Plate Current	14.5 mA	Published value from supplied target entry
Grid-No	3 mA	Published value from supplied target entry
Grid-No.1 Voltage for total plate current of	0.7	Published value from supplied target entry
Deflecting-Electrode Switching Voltage*	30 volts	Published value from supplied target entry
plate currents	0 volts	Published value from supplied target entry
Plate-No.1 Current with Deflecting-Electrode-No.1 Voltage =	55	Published value from supplied target entry
and Deflecting-Electrode-No	1.3 mA	Published value from supplied target entry
Plate-No	95	Published value from supplied target entry
Voltage =	0.04 mA	Published value from supplied target entry
Deflecting-Electrode-No	2	Published value from supplied target entry
* Defined as the total voltage change from	75 volts	Published value from supplied target entry
Heater Voltage	14.7 volts	Published value from supplied target entry
Heater Current	0.6 amperes	Published value from supplied target entry
Plate Voltage	250 volts	Published value from supplied target entry
Grid-No	250 volts	Published value from supplied target entry
Grid-No.1 (Control-Grid) Voltage –	20 volts	Published value from supplied target entry
Grid-No	2	Published value from supplied target entry
Amplification Factor	58	Published value from supplied target entry
Plate Resistance (Approx.)	5000 ohms	Published value from supplied target entry
Plate Voltage	400 volts	Published value from supplied target entry
Peak Positive Pulse Plate Voltage#	2500 volts	Published value from supplied target entry
Grid-No	300 volts	Published value from supplied target entry
Peak Negative Grid-No.1 Voltage	400 volts	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Dissipation*	12 watts	Published value from supplied target entry

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker