



ELECTRONIC TUBE REFERENCE

6CB5A

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Glass-octal beam-power tube designed as a horizontal-deflection amplifier in color and black-and-white television receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8GD	BASE PINS	9
NOMINAL HEATER	6.3 V / 2.5 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	5000 Ω
TRANSCONDUCTANCE	0.0088 S
AMPLIFICATION FACTOR	3.8
MAXIMUM PLATE VOLTAGE	880 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	26 W
MAXIMUM SCREEN DISSIPATION	4 W
MAXIMUM CATHODE CURRENT	240 mA
<i>Beam power horizontal-deflection service.</i>	

Glass-octal beam-power tube used as a horizontal-deflection amplifier in color and black-and-white television receivers.



SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Beam Power

APPLICATION

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Horizontal deflection amplifier	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Beam Power

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	2.5 A	—
Plate voltage	6800 V	Typical operating conditions
Plate current	46090 mA	Typical operating conditions



1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.4 pF	—
Input capacitance	22 pF	—
Output capacitance	10 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive pulse plate voltage	6800 V	HorizontalDeflection
Peak negative pulse plate voltage	-1650 V	HorizontalDeflection
Peak cathode current	850 mA	HorizontalDeflection
Plate voltage	175 V	ClassA
Grid #2 voltage	175 V	ClassA
Plate current	90 mA	ClassA
Grid #2 current	6 mA	ClassA



SOURCE DATA APPENDIX

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC~	6.3 V	Published table column 1 of 2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC~	10 V	Published table column 2 of 2
E~. =	6.3 V	—
GRID-N=	2 V	Published table column 1 of 2
GRID-N=	150 V	Published table column 2 of 2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 1 to plate	0.4 pF	—
Plate Voltage	75 V	Published table column 1 of 2
Plate Voltage	175 V	Published table column 2 of 2
Grid	0 V	Published table column 1 of 4
Grid	2 V	Published table column 2 of 4
Grid	150 V	Published table column 3 of 4
Grid	175 V	Published table column 4 of 4
Grid-No.1 Voltage	0 V	Published table column 1 of 2
Grid-No.1 Voltage	-30 V	Published table column 2 of 2
Plate Resistance (Approx)	5000 Ω	—
Transconductance	8800 μS	—
Plate Current	460 mA	Published table column 1 of 2
Plate Current	90 mA	Published table column 2 of 2
for plate ma. =	1 V	Published table column 1 of 2
for plate ma. =	-60 V	Published table column 2 of 2

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC (Including boost) PLATE VOLTAGE	880 V	—
PEAK POSITIVE-PULSE PLATE VOLTAGE	6800 V	—
PEAK NEGATIVE-PULSE PLATE VOLTAGE	1650 V	—
DC GRID-No.1 (CONTROL-GRID) VOLTAGE_	-55 V	—
Peak	850 mA	—
DC	240 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PLATE DISSIPATIONt	26 W	—
respect to cathode	200 V	—
Por grid-resistor-bias operation	0.47 MΩ	—
The do component must not exceed	100 V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	6.3 V	Published in approved 6CB5A target datasheet entry; Section1
Heater Current	2.5 A	Published in approved 6CB5A target datasheet entry; Section1
Plate Current 460»	90 mA	Published in approved 6CB5A target datasheet entry; Section1
Grid-No.2 Current 42»	6 mA	Published in approved 6CB5A target datasheet entry; Section1
Grid-No. 1 Voltage (Approx.) for plate current of	1 mA	Published in approved 6CB5A target datasheet entry; Section1
DC Plate Voltage	880 V	Published in approved 6CB5A target datasheet entry; Section1
Peak Positive-Pulse Plate Voltage*	6800 V	Published in approved 6CB5A target datasheet entry; Section1
Peak Negative-Pulse Plate Voltage	1660 V	Published in approved 6CB5A target datasheet entry; Section1
DC Grid-No. 1 (Control-Grid) Voltage	-56 V	Published in approved 6CB5A target datasheet entry; Section1
Peak Negative-Pulse Grid-No. 1 Voltage	220 V	Published in approved 6CB5A target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Cathode Current	850 mA	Published in approved 6CB5A target datasheet entry; Section1
Average Cathode Current	240 mA	Published in approved 6CB5A target datasheet entry; Section1
Grid-No.2 Input	4 W	Published in approved 6CB5A target datasheet entry; Section1
Plate Dissipation!	26 W	Published in approved 6CB5A target datasheet entry; Section1
Bulb Temperature (At hottest point)	220 °C	Published in approved 6CB5A target datasheet entry; Section1
Grid-No.1-Circuit Resistance	0.47 MΩ	Published in approved 6CB5A target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.4 pF	Published in approved 6CB5A target datasheet entry; Section1
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	22 pF	Published in approved 6CB5A target datasheet entry; Section1
Plate to Cathode, Heater, Grid No.2, and Grid No.3	10 pF	Published in approved 6CB5A target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 75	175 V	Published in approved 6CB5A target datasheet entry; Section1
Grid-No.2 Voltage 150	175 V	Published in approved 6CB5A target datasheet entry; Section1
Grid-No.1 Voltage 0	-30 V	Published in approved 6CB5A target datasheet entry; Section1

TUBE TINKER

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