



ELECTRONIC TUBE REFERENCE

6HB5

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Compactron beam-power pentode designed for television horizontal-deflection amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12	BASE PINS	12
NOMINAL HEATER	6.3 V / 1.5 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	11000 Ω
TRANSCONDUCTANCE	0.0091 S
AMPLIFICATION FACTOR	4.7
MAXIMUM PLATE VOLTAGE	770 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	18 W
MAXIMUM SCREEN DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	230 mA
<i>Horizontal-deflection service; pulse ratings parameterized.</i>	

Duodecar type used as horizontal-deflection amplifier H~ "h in television receivers. Outlines section, 15B; requires J2BJ duodecar 12-contact socket. Heater Voltage (ac/dc) 6.



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
Plate Voltage	130 V	Published operating/characteristic table
Screen Voltage	220 V	Published operating/characteristic table
Grid Voltage	-20 V	Published operating/characteristic table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	50 mA	Published operating/characteristic table
Screen Current	1.75 mA	Published operating/characteristic table
Transconductance	9100 μ S	Published operating/characteristic table
Plate Resistance	11000 ohm	Published operating/characteristic table



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive pulse plate voltage	6600 V	Horizontal Deflection; Pulse

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative pulse plate voltage	1500 V	HorizontalDeflection;Pulse
Plate current	50 mA	HorizontalDeflection
Grid 2 current	2 mA	HorizontalDeflection
Grid 1 voltage	-20 V	HorizontalDeflection



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Pulse Plate Voltage	6000 V	HorizontalDeflection
Peak Negative Pulse Plate Voltage	1500 V	HorizontalDeflection



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	130 volts	Plate Voltage 5000 60 130 130 volts
Grid-No	130 volts	Grid-No.2 (Screen-Grid) Voltage 130 130 130 130 volts

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 (Control-Grid) Voltage	-20 volts	Grid-No.1 (Control-Grid) Voltage - 0 -20 -20 volts
Amplification Factor	4.7	Amplification Factor - - - 4.7
Plate Resistance (Approx.)	11000	Plate Resistance (Approx.) - - 11000
Transconductance	9100	Transconductance - - 9100
Plate Current	60	Plate Current - 410- 60
Grid-No	1.75 mA	Grid-No.2 Current - 24" 1.75 mA
current of	-33 mA	current of 1 mA -66 - -33 - volts
DC Plate Supply Voltage	770 volts	DC Plate Supply Voltage 770 volts
Peak Positive-Pulse Plate Voltage#	6000 volts	Peak Positive-Pulse Plate Voltage# 6000 volts
Peak Negative-Pulse Plate Voltage	1500 volts	Peak Negative-Pulse Plate Voltage 1500 volts
DC Grid-No	220 volts	DC Grid-No.2 Voltage 220 volts
DC Grid-No.1 Voltage	55 volts	DC Grid-No.1 Voltage - 55 volts
Peak Negative-Pulse Grid-No.1 Voltage	330 volts	Peak Negative-Pulse Grid-No.1 Voltage 330 volts
Peak Cathode Current	800 mA	Peak Cathode Current 800 mA
Average Cathode Current	230 mA	Average Cathode Current 230 mA
Grid-No.1-Circuit Resistance	1 megohm	Grid-No.1-Circuit Resistance 1 megohm

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
• Grid No	2	• Grid No.2 tied to plate.
Grid-No	3.5 watts	Grid-No.2 Input 3.5 watts
Heater Warm-up Time (Average)	11 seconds	Heater Warm-up Time (Average) 11 11 seconds
Grid No1 to Cathode, Heater, Grid No	3	Grid No1 to Cathode, Heater, Grid No.2, Grid No.3, and
Plate to Cathode, Heater, Grid No	3	Plate to Cathode, Heater, Grid No.2, Grid No.3, and Internal

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	1.9 pF	Grid to Plate 1.9 pF
Grid to Cathode, Heater, Pentode Grid No	3 pF	Grid to Cathode, Heater, Pentode Grid No.3, and Internal Shield 3 pF

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to Cathode, Heater, Pentode Grid No	1.9 pF	Plate to Cathode, Heater, Pentode Grid No.3, and Internal Shield 1.9 pF
Grid No.1 to Plate	0.01 pF	Grid No.1 to Plate 0.010 max pF
Heater to Cathode'	3.8 pF	Heater to Cathode' 3.8 pF

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