



ELECTRONIC TUBE REFERENCE

6HF5

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Compactron beam-power pentode designed for horizontal-deflection amplification in color and black-and-white television receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	12	BASE PINS	12
NOMINAL HEATER	6.3 V / 2.25 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
TRANSCONDUCTANCE	0.0113 S
AMPLIFICATION FACTOR	3
MAXIMUM PLATE VOLTAGE	900 V
MAXIMUM SCREEN VOLTAGE	190 V
MAXIMUM PLATE DISSIPATION	28 W
MAXIMUM SCREEN DISSIPATION	5.5 W
MAXIMUM CATHODE CURRENT	315 mA
High-current horizontal-deflection beam pentode; pulse ratings retained as parameters.	

Duodecar type used as horizontal-deflection amplifier in color and black-and-white television receivers. Out- lines section, 16B; requires duodecar 12-contact socket. Heater: volts (ac/dc), 6.



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	7000 V	HorizontalDeflection;Pulse
Peak negative pulse plate voltage	1100 V	HorizontalDeflection;Pulse
Plate current	125 mA	HorizontalDeflection
Grid 2 current	5 mA	HorizontalDeflection
Grid 1 voltage	-25 V	HorizontalDeflection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 1 to plate capacitance	0.5 pF	—
Input capacitance	24 pF	—
Output capacitance	10 pF	—



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	125 volts	Plate Voltage 5000 70 175 125 volts
Grid-No	125 volts	Grid-No.2 (Screen-Grid) Voltage 125 125 125 125 volts
Amplification Factor	-3	Amplification Factor - -3
Plate Current	125 mA	Plate Current - 570- 125 - mA
Grid-No	4.5 mA	Grid-No.2 Current - 34- 4.5 - mA
current of	-54 mA	current of 1 mA 140 - -54 - -
DC Plate Supply Voltage	900 volts	DC Plate Supply Voltage 900 volts
Peak Negative-Pulse Plate Voltage	1100 volts	Peak Negative-Pulse Plate Voltage 1100 volts
DC Grid-No	190 volts	DC Grid-No.2 Voltage 190 volts
Peak Negative-Pulse Grid-No.1 Voltage	250 volts	Peak Negative-Pulse Grid-No.1 Voltage 250 volts
Peak Cathode Current	1100 mA	Peak Cathode Current 1100 mA
Average Cathode Current	315 mA	Average Cathode Current 315 mA
Grid-No	1 megohm	Grid-No. 1-Circuit Resistance 1 megohm

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive-Pulse Plate Voltage# (Absolute Maximum)	7500 volts	Peak Positive-Pulse Plate Voltage# (Absolute Maximum) 7500* volts
Plate Dissipation!	28 watts	Plate Dissipation! 28 watts
Grid-No	5.6 watts	Grid-No.2 Input 5.6 watts
Grid to Cathode, Heater, Pentode Cathode, Grid No	3	Grid to Cathode, Heater, Pentode Cathode, Grid No.3,
Plate to Cathode, Heater, Pentode Cathode, Grid No	3	Plate to Cathode, Heater, Pentode Cathode, Grid No.3,
Grid No.1 to Cathode, Heater, Grid No	3	Grid No.1 to Cathode, Heater, Grid No.2, Grid No.3,
Plate to Cathode, Heater, Grid No	3	Plate to Cathode, Heater, Grid No.2, Grid No.3,

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	3.6 pF	Grid to Plate 3.6 pF
Grid No.1 to Plate	0.1 pF	Grid No.1 to Plate 0.1 max pF
Triode Grid to Pentode Plate	0.016 pF	Triode Grid to Pentode Plate 0.016 max 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