



ELECTRONIC TUBE REFERENCE

5HZ6

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

High-transconductance dual-control pentode designed as an FM sound detector in color and black-and-white television receivers. Its two independent control grids provide specialized detector and amplifier action with considerably greater signal capability than earlier detector pentodes.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	4.75 V / 600 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	180000 Ω
TRANSCONDUCTANCE	0.0105 S
AMPLIFICATION FACTOR	38
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.65 W
<i>Sharp-cutoff pentode with two independent control grids; electrical counterpart retained.</i>	

Miniature type used as sound-detector tube in FM and color and black-and-white television receivers. Tube has two independent control grids. Outlines section, 5C; requires miniature 7-contact socket. Type 5HZ6 is identical with type 6HZ6 except for heater ratings. 7EN 5HZ6 6HZ6

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	DualControlAmplifier
Screen voltage	125 V	DualControlAmplifier
Plate current	10 mA	DualControlAmplifier
Screen current	3.5 mA	DualControlAmplifier
Maximum plate voltage	330 V	—
Maximum screen voltage	330 V	—
Maximum plate dissipation	3 W	—
Maximum screen dissipation	0.65 W	—
Heater/filament voltage	4.75 V	DerivativeSheet
Heater/filament current	600 mA	DerivativeSheet
Heater warm-up time	11 s	ControlledWarmup

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 transconductance	10500 μ S	DualControlAmplifier
Grid No.3 transconductance	7875 μ S	DualControlAmplifier
Plate resistance	180000 ohm	DualControlAmplifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1-to-plate capacitance	0.02 pF	—
Grid No.3-to-plate capacitance	0.8 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 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage (ac/dc)	4.76 volts	Published value from supplied target entry
Heater Current	0.45 ampere	Published value from supplied target entry
Heater Warm-up Time (Average)	11 seconds	Published value from supplied target entry
Plate Supply Voltage	150 volts	Published value from supplied target entry
Grid-No	0 volts	Published value from supplied target entry
Grid-No	100 volts	Published value from supplied target entry
Grid-No.1 Supply Voltage	0 volts	Published value from supplied target entry
Plate Resistance (Approx.)	0.11 megohm	Published value from supplied target entry
Transconductance, Grid No.1 to Plate	3400	Published value from supplied target entry
Transconductance, Grid No	600	Published value from supplied target entry
Plate Current	3.2 mA	Published value from supplied target entry
Grid-No	3.2 mA	Published value from supplied target entry
Grid-No	-7 volts	Published value from supplied target entry
Grid-No.1 Supply Voltage (Approx.) for plate current of	-4.6 volts	Published value from supplied target entry
Plate Voltage	300 volts	Published value from supplied target entry
Grid-No	3	Published value from supplied target entry
Grid-No	300 volts	Published value from supplied target entry
Grid-No	300	Published value from supplied target entry
Plate Dissipation	1.7 watts	Published value from supplied target entry
Grid-No	0.1 watt	Published value from supplied target entry

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No	2	Published value from supplied target entry
For grid-No	1 volts	Published value from supplied target entry
For grid-No	300 volts	Published value from supplied target entry
Grid-No	0.68 megohm	Published value from supplied target entry
Heater Voltage (ac/dc)	6.3 volts	Published value from supplied target entry
Grid Voltage, Positive-bias value	0 volts	Published value from supplied target entry
Plate Dissipation	1.5 watts	Published value from supplied target entry
Plate Voltage	100 volts	Published value from supplied target entry
Amplification Factor	38	Published value from supplied target entry
Plate Resistance (Approx.)	7100 ohms	Published value from supplied target entry
Transconductance	5300	Published value from supplied target entry
Plate Current	8.5 mA	Published value from supplied target entry

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Heater-Cathode Voltage ±	100 volts	Published value from supplied target entry

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	1.6 pF	Published value from supplied target entry
Grid to Cathode and Heater	2.6 pF	Published value from supplied target entry
Plate to Cathode and Heater (Unit No.1)	1.6 pF	Published value from supplied target entry
Plate to Cathode and Heater (Unit No	1 pF	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