

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
PENTODE-TRIODE

11LQ8

Power - Pentode (NOT beam) electronic tube

Miniature triode-pentode for television receivers. The triode serves sync-separator or sound-IF functions while the pentode provides video-output amplification, combining control and output stages in one tube.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9DX	BASE PINS	9
NOMINAL HEATER	10.9 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9DX - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – 2K	B	K – Cathode	CONNECTED
PIN2 – 2G1	B	G1 – Control Grid	CONNECTED
PIN3 – 2P	B	P – Plate (Anode)	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – H	–	H – Heater	CONNECTED
PIN6 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN6 – IS	A	IS – Internal Screen	CONNECTED
PIN6 – 1K	A	K – Cathode	CONNECTED
PIN7 – 1G1	A	G1 – Control Grid	CONNECTED
PIN8 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN9 – 1P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	4400 Ω
TRANSCONDUCTANCE	0.0104 S
AMPLIFICATION FACTOR	35
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	2 W
<i>medium-mu</i>	

SECTION2 Pentode	
PLATE RESISTANCE	75000 Ω
TRANSCONDUCTANCE	0.023 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM PLATE DISSIPATION	5 W
MAXIMUM SCREEN DISSIPATION	1 W
<i>sharp-cutoff</i>	

Miniature triode-pentode used in television receivers, with the triode serving sync-separator/sound-IF functions and the pentode serving video output.

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	300 V	Inherited from explicitly referenced 6-volt parent type
Plate Dissipation	2 W	Inherited from explicitly referenced 6-volt parent type

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	4400 Ω	—
Transconductance	10400 μS	—

1971 RCA HB3 BINDER 5 OF 7

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	300 V	Inherited from explicitly referenced 6-volt parent type
Plate Dissipation	5 W	Inherited from explicitly referenced 6-volt parent type

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	75000 Ω	—
Transconductance	23000 μS	—
Screen Supply Voltage	125 V	—

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 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to Plate	2.8 pF	—
Grid to other electrodes	4.2 pF	—
Plate to other electrodes	2.4 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	125 V	ClassA
Cathode-bias resistor	68 ohm	ClassA
Plate current	15 mA	ClassA

1975 RCA RC30

Section 2 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.12 pF	—
Grid No.1 to other electrodes	14 pF	—
Plate to other electrodes	4.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	125 V	ClassA
Screen-grid supply voltage	125 V	ClassA
Cathode-bias resistor	82 ohm	ClassA
Plate current	16.5 mA	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen-grid current	3.1 mA	ClassA