

ELECTRONIC TUBE REFERENCE

6JT8

Voltage Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode-pentode combination designed for television receiver signal-processing service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9DX	BASE PINS	9
NOMINAL HEATER	6.3 V / 725 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	37000 Ω
TRANSCONDUCTANCE	0.0027 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1 W
<i>Published ratings and characteristics promoted where clearly stated; identical repeated diode/triode sections compressed where applicable.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.02 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	4 W
MAXIMUM SCREEN DISSIPATION	1.1 W
<i>Published ratings and characteristics promoted where clearly stated; identical repeated diode/triode sections compressed where applicable.</i>	

The Westinghouse 6JT8 combines a high-mu triode with a sharp-cutoff pentode for sync/phase and video-amplifier service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1940 RCA

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

1940 RCA

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	725 mA	Published nominal value
Transconductance	2700 μ S	Published operating characteristic
Amplification factor	100	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Sync separator; voltage amplifier; video amplifier	Printed source application

1940 RCA

Section 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	725 mA	Published nominal value
Transconductance	20000 μ S	Published operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	17.6 W	Published maximum or stated design maximum

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	725 mA	—
Amplification Factor	100 ratio	—
Grid-Plate Capacitance	3.2 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	1 W	—

1965 WESTINGHOUSE DATA BOOK

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	4 W	—
Maximum Screen Supply Voltage	330 V	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Plate Capacitance	0.075 pF	ShieldedOrMaximum
Input Capacitance	13 pF	—
Output Capacitance	3 pF	—



SOURCE DATA APPENDIX

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater-Cathode Voltage :	200 V	Other;PublishedValue1
Heater-Cathode Voltage :	200 V	Other;PublishedValue2
Peak value	100 V	Other;PublishedValue1
Peak value	100 V	Other;PublishedValue2
Plate Voltage	330 V	MaximumRating
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 V	MaximumRating
Plate Dissipation	4 W	MaximumRating
For grid-No.2 voltages up to 165 volts	1.1 V	MaximumRating
For fixed-bias operation	0.5 megohm	MaximumCircuitValue;PublishedValue1
For fixed-bias operation	0.25 megohm	MaximumCircuitValue;PublishedValue2
For cathode-bias operation	1 megohm	MaximumCircuitValue;PublishedValue1
For cathode-bias operation	1 megohm	MaximumCircuitValue;PublishedValue2
Maximum Plate Voltage	330 V	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	250 V	Characteristic;PublishedValue1
Plate Supply Voltage	50 V	Characteristic;PublishedValue2
Plate Supply Voltage	200 V	Characteristic;PublishedValue3
Grid-No.2 Supply Voltage	100 V	Characteristic;PublishedValue1
Grid-No.2 Supply Voltage	100 V	Characteristic;PublishedValue2
Grid-No.1 Voltage	-2 V	Characteristic;PublishedValue1
Grid-No.1 Voltage	0 V	Characteristic;PublishedValue2
Cathode-Bias Resistor	82 ohm	Characteristic
Plate Resistance (Approx.)	37000 ohm	Characteristic;PublishedValue1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx.)	50000 ohm	Characteristic;PublishedValue2
Plate Current	1.5 mA	Characteristic;PublishedValue1
Plate Current	65 mA	Characteristic;PublishedValue2
Plate Current	17 mA	Characteristic;PublishedValue3
Grid-No.2 Current	18 mA	Characteristic;PublishedValue1
Grid-No.2 Current	3.5 mA	Characteristic;PublishedValue2
100 iiA.	-6 V	Characteristic
20 juA	-5.3 V	Characteristic
Plate Resistance	37000 ohm	Section1
Transconductance	2700 uS	Section1
Amplification Factor	100	Section1

1975 RCA RC30

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	Section2
Maximum Screen Voltage	330 V	Section2
Maximum Plate Dissipation	4 W	Section2
Maximum Screen Dissipation	1.1 W	Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	50000 ohm	Section2
Transconductance	20000 uS	Section2