

ELECTRONIC TUBE REFERENCE

6LE8

Voltage - Dual Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-PENTODE

Twin pentode designed for color-television chroma processing, combining color demodulation with matrix amplification in one compact receiving tube.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9QZ	BASE PINS	9
NOMINAL HEATER	6.3 V / 750 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

9QZ - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	2 W
<i>Representative specification for both identical pentode sections.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.011 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	2 W
<i>Second physical pentode restored under one-row-per-physical-section policy; identical shared-section specification.</i>	

Twin pentode used as a combined color demodulator and matrix amplifier in color television receivers.



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	300 V	—
Maximum Screen Voltage	150 V	—
Maximum Plate Dissipation	2 W	—
Maximum Screen Dissipation	2 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	11000 μ S	—

CONSTRUCTION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
SharedSectionSpecification	1	AppliesEquallyToBothPhysicalPentodeSections



SOURCE OPERATING CONDITIONS

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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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	760 mA	—
COMMON-CATHODE, GRID No. 1 & GRID No	2	Published source row
DC Plate Voltage (Each unit) Eb	300 V	Published source row
DC Grid-No	2 V	Published source row
DC Grid-No (value 2)	150 V	Published source row
Heater Voltage, AC or DC E(f	5.7 V	Published source row
Heater Voltage, AC or DC E(f (value 2)	6.9 V	Published source row
Grid-No	2	Published source row
Plate Dissipation Each unit P	2 W	Published source row
b For this test, EcI =	-3	Published source row
b For this test, EcI = (value 2)	2	Published source row

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage, AC or DC Ef	6.3 V	Published source row
Heater Current If	760 mA	Published source row
Plate Resistance rp	50000	Published source row
Grid-No.1-to-Plate Transconductance gm(glp)	5800	Published source row
Grid-No	3 μS	Published source row
Grid-No (value 2)	350 μS	Published source row
DC Plate Current ly	7.6 mA	Published source row
DC r Grid-No	2 mA	Published source row
DC r Grid-No (value 2)	14.5 mA	Published source row
Cutoff DC Grid-No	3	Published source row
Heater Voltage Ef	6.3 V	Published source row
DC Plate Voltage Ey	100 V	Published source row
DC Grid-No	3 V	Published source row
DC Grid-No (value 2)	0 V	Published source row
DC Grid-No	2 V	Published source row

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Grid-No (value 2)	100 V	Published source row
DC Grid-No. 1 (Control-Grid) Voltage Ecl	-2.5 V	Published source row



SOURCE OPERATING CONDITIONS

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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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	Nominal
Heater Current	760 mA	Nominal
Plate Voltage	100 V	ClassA;Grid1Control
Screen Voltage	100 V	ClassA;Grid1Control
Control Grid Voltage	-2.5 V	ClassA;Grid1Control
Plate Current	8 mA	ClassA;Grid1Control
Screen Current	15 mA	ClassA;Grid1Control
Grid No.3 Control Transconductance	350 uS	ClassA;Grid1Control
Alternate Plate Current	7.6 mA	ClassA;Grid3Control
Alternate Screen Current	14.5 mA	ClassA;Grid3Control

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate-to-All-Other-Electrodes Capacitance	3.7 pF	EachUnit
Grid No.1-to-All-Other-Electrodes Capacitance	15.5 pF	EachUnit
Grid No.3-to-All-Other-Electrodes Capacitance	6 pF	EachUnit

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.3-to-Plate Capacitance	2.7 pF	EachUnit
Grid No.3 Unit-to-Unit Capacitance	0.1 pF	BetweenUnits

TUBE TINKER

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