

ELECTRONIC TUBE REFERENCE

6GL7

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Dual triode intended for television vertical-deflection service, combining oscillator/driver and power-output functions where applicable. Manufacturer data emphasize vertical-sweep operation, pulse-voltage capability, and the stronger section's current and dissipation requirements.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8BD	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.05 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

8BD - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	30000 Ω
TRANSCONDUCTANCE	0.0022 S
AMPLIFICATION FACTOR	66
MAXIMUM PLATE VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Vertical-oscillator section.</i>	

SECTION2 Triode	
PLATE RESISTANCE	780 Ω
TRANSCONDUCTANCE	0.0064 S
AMPLIFICATION FACTOR	5
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM CATHODE CURRENT	50 mA
<i>Vertical-deflection amplifier section; 1500 V pulse plate rating preserved as parameter.</i>	

Dissimilar dual triode for television vertical oscillator and vertical-deflection output amplifier service.

SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	30000 ohm	—
Transconductance	1600 uS	—
Amplification factor	66	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	350 V	—
Maximum plate dissipation	1 W	—
Heater voltage	6.3 V	—
Heater current	1.05 A	—
Typical plate voltage	275 V	—
Typical plate current	13 mA	—

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	780 ohm	—
Transconductance	6400 uS	—
Amplification factor	5	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	550 V	—
Maximum plate dissipation	10 W	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum cathode current	50 mA	—
Heater voltage	6.3 V	—
Heater current	1.05 A	—
Typical plate voltage	175 V	—
Typical plate current	46 mA	—



SOURCE DATA APPENDIX

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Voltage	250 V	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Current	2 mA	Section1

1968 GENERAL ELECTRIC CO

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Pulse Plate Voltage	1500 V	Section2
Typical Plate Voltage	175 V	Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical Plate Current	46 mA	Section2

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
Heater voltage	6.3 V	—
Heater current	1.05 A	—
Plate voltage	250 V	Section1;ClassA
Plate current	2 mA	Section1;ClassA
Maximum plate voltage	350 V	Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	30000 ohm	Section1
Transconductance	2200 uS	Section1
Amplification factor	66	Section1

1971 RCA HB3 BINDER 5 OF 7

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	175 V	Section2;ClassA
Plate current	46 mA	Section2;ClassA
Maximum plate voltage	550 V	Section2
Peak positive-pulse plate voltage	1500 V	Section2;VerticalDeflection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	780 ohm	Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6400 uS	Section2
Amplification factor	5	Section2