



ELECTRONIC TUBE REFERENCE

6K6GT

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Glass-octal power pentode for radio-receiver output stages, also usable in triode connection for television vertical-deflection amplification. Its primary role is low-frequency power output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B6-8BI	BASE PINS	8
NOMINAL HEATER	6.3 V / 400 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	90000 Ω
TRANSCONDUCTANCE	0.0023 S
AMPLIFICATION FACTOR	150
MAXIMUM PLATE VOLTAGE	315 V
MAXIMUM SCREEN VOLTAGE	285 V
MAXIMUM PLATE DISSIPATION	8.5 W
MAXIMUM SCREEN DISSIPATION	2.8 W
MAXIMUM CATHODE CURRENT	25 mA
<i>Published ratings and characteristics promoted where clearly legible in the approved source.</i>	

Glass-octal power pentode for radio-receiver output stages; it can also be triode-connected for television vertical-deflection amplification.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1944 Hytron

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

1944 HYTRON

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	3.4 W	ClassA;OneTube



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	315 V	Published handbook rating
Maximum screen voltage	285 V	Published handbook rating
Plate voltage	315 V	ClassA
Screen voltage	250 V	ClassA
Control-grid bias	21 V	ClassA
Plate current	25.5 mA	ClassA
Screen current	4 mA	ClassA
Load resistance	9000 ohm	ClassA
Power output	4.5 W	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	110000 ohm	Published handbook characteristic
Transconductance	2100 μ S	Published handbook characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	400 mA	Published heater rating


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	315 V	ClassA1
Screen Voltage	250 V	ClassA1
TriodeConnectionPlateVoltage	250 V	TriodeConnection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	25.5 mA	ClassA1
Power Output	4.5 W	ClassA1


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA
Power_output	3.4 W	ClassA,OneTube
Power_output	10.5 W	PushPull,TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2300 uS	ClassA
Plate resistance	100000 ohm	ClassA
Plate_current	33 mA	ClassA,OneTube

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	3 pF	Section1
Output capacitance	3 pF	Section1



SOURCE OPERATING CONDITIONS

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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
Plate Current	25.5 mA	—
Plate Current	33 mA	—
Plate Current	55 mA	—
Plate Current	37.5 mA	—
Screen Current	5.5 mA	—
Screen Current	10 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Current	9 mA	—
Screen Current	3 mA	—



SOURCE DATA APPENDIX

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	—
Heater current	400 mA	—
Voltage	6.3 V	Published source row
Current	400 mA	Published source row
PLATE VOLTAGE	315 V	Published source row
GRID-No	7 V	Published source row
GRID-No (value 2)	285 V	Published source row
GRID-No	2 W	Published source row
GRID-No (value 2)	2.8 W	Published source row
PLATE DISSIPATION	8.5 W	Published source row
Plate Voltage	100 V	Published source row
Plate Voltage (value 2)	250 V	Published source row
Plate Voltage (value 3)	315 V	Published source row
Grid-No	2 V	Published source row
Grid-No (value 2)	100 V	Published source row
Grid-No (value 3)	250 V	Published source row
Grid-No.1 Voltage	-7 V	Published source row
Grid-No.1 Voltage (value 2)	-18 V	Published source row
Grid-No.1 Voltage (value 3)	-21 V	Published source row

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak AF Grid-No.1 Voltage	7 V	Published source row
Peak AF Grid-No.1 Voltage (value 2)	18 V	Published source row
Peak AF Grid-No.1 Voltage (value 3)	21 V	Published source row
Zero-Signal Plate Current	9 mA	Published source row
Zero-Signal Plate Current (value 2)	32 mA	Published source row
Zero-Signal Plate Current (value 3)	25.5 mA	Published source row
Max.-Signal Plate Current	9.5 mA	Published source row

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No	1 pF	Published source row
Grid No (value 2)	0.5 pF	Published source row
grid No	2 pF	Published source row
grid No (value 2)	5.5 pF	Published source row
grid No	2 pF	Published source row
grid No (value 2)	6 pF	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
For cathode-bias operation 2.2	2.2 MΩ	Published in approved 6K6GT target datasheet entry; Section1
# Pulse duration must not exceed 15% of a vertical scanning cycle (	2.5 milliseconds	Published in approved 6K6GT target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	315 V	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.2 (Screen-Grid) Voltage	285 V	Published in approved 6K6GT target datasheet entry; Section1
Plate Dissipation	8.5 W	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.2 Input	2.8 W	Published in approved 6K6GT target datasheet entry; Section1
Plate Voltage 100 250	315 V	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.2 Voltage 100 250	250 V	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.1 (Control-Grid) Voltage -7 -18	-21 V	Published in approved 6K6GT target datasheet entry; Section1
Peak AF Grid-No.1 Voltage 7 18	21 V	Published in approved 6K6GT target datasheet entry; Section1
Zero-Signal Plate Current 9 32	25.5 mA	Published in approved 6K6GT target datasheet entry; Section1
Maximum-Signal Plate Current 9.5 33	28 mA	Published in approved 6K6GT target datasheet entry; Section1
Zero-Signal Grid-No.2 Current 1.6 5.5	4 mA	Published in approved 6K6GT target datasheet entry; Section1
Maximum-Signal Grid-No.2 Current 3 10	9 mA	Published in approved 6K6GT target datasheet entry; Section1
Plate Resistance (Approx.) 104000 90000	110000 Ω	Published in approved 6K6GT target datasheet entry; Section1
Transconductance 1600 2300	2100 μS	Published in approved 6K6GT target datasheet entry; Section1
Load Resistance 12000 7600	9000 Ω	Published in approved 6K6GT target datasheet entry; Section1
Total Harmonic Distortion 11 11	15 %	Published in approved 6K6GT target datasheet entry; Section1
Maximum-Signal Power Output 0.35 3.4	4.5 W	Published in approved 6K6GT target datasheet entry; Section1
Plate Supply Voltage 285	285 V	Published in approved 6K6GT target datasheet entry; Section1
Maximum-Signal Plate Current 72	61 mA	Published in approved 6K6GT target datasheet entry; Section1
Zero-Signal Grid-No.2 Current 9	9 mA	Published in approved 6K6GT target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum-Signal Grid-No.2 Current 17	13 mA	Published in approved 6K6GT target datasheet entry; Section1
Effective Load Resistance (Plate-to-plate) 12000	12000 Ω	Published in approved 6K6GT target datasheet entry; Section1
Total Harmonic Distortion 6	4 %	Published in approved 6K6GT target datasheet entry; Section1
Maximum-Signal Power Output 10.5	9.8 W	Published in approved 6K6GT target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.1 Voltage	-18 V	Published in approved 6K6GT target datasheet entry; Section1
Plate Current	37.5 mA	Published in approved 6K6GT target datasheet entry; Section1
Transconductance	2700 μS	Published in approved 6K6GT target datasheet entry; Section1
Plate Resistance (Approx.)	2500 Ω	Published in approved 6K6GT target datasheet entry; Section1
Grid-No.1 Voltage (Approx.) for plate current of	0.5 mA	Published in approved 6K6GT target datasheet entry; Section1

TUBE TINKER

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