

ELECTRONIC TUBE REFERENCE

6AU5GT

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
BEAMPOWER

Glass-octal beam-power tube for efficient television horizontal-deflection output, with multi-kilovolt pulse capability and additional published triode-connected regulator service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6CK	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.25 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

6CK - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	A	G1 – Control Grid	CONNECTED • verified
PIN2 – Pin 2	–	H – Heater	CONNECTED • verified
PIN3 – Pin 3	A	BP – Beam-Forming Plate	CONNECTED • verified
PIN3 – Pin 3	A	K – Cathode	CONNECTED • verified
PIN5 – Pin 5	A	P – Plate (Anode)	CONNECTED • verified
PIN7 – Pin 7	–	H – Heater	CONNECTED • verified
PIN8 – Pin 8	A	G2 – Screen Grid	CONNECTED • verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	6000 Ω
TRANSCONDUCTANCE	0.0056 S
AMPLIFICATION FACTOR	5.9
MAXIMUM PLATE VOLTAGE	550 V
MAXIMUM SCREEN VOLTAGE	200 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	110 mA
<i>Horizontal-deflection beam power tube; peak cathode current promoted, average limit retained as parameter.</i>	

Glass-octal beam-power tube used as a horizontal-deflection amplifier in low-cost high-efficiency television circuits.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	1.25 A	—



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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	115 V	Amplifier
Screen voltage	175 V	Amplifier
Control-grid voltage	-20 V	Amplifier
Plate current	60 mA	Amplifier
Screen current	6.8 mA	Amplifier
Positive pulse plate voltage maximum	5500 V	HorizontalDeflection

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	1.25 A	—
Peak cathode current	400 mA	—

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published table
Heater current	1.25 A	Published table
Transconductance	5600 μ S	HorizontalDeflection

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum peak positive plate voltage	5500 V	HorizontalDeflection
Maximum DC screen voltage	200 V	HorizontalDeflection
Maximum peak cathode current	400 mA	HorizontalDeflection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	60 mA	HorizontalDeflection
Screen current	6.8 mA	HorizontalDeflection
Maximum total plate and screen dissipation	10 W	Published



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	—
Heater current	1.25 A	—
DC plate voltage	550 V	HorizontalDeflectionAmplifier
Peak positive-pulse plate voltage	5500 V	HorizontalDeflectionAmplifier
Peak negative-pulse plate voltage	-1250 V	HorizontalDeflectionAmplifier
DC screen voltage	200 V	HorizontalDeflectionAmplifier
Peak negative-pulse control-grid voltage	-300 V	HorizontalDeflectionAmplifier
Peak cathode current	400 mA	HorizontalDeflectionAmplifier
Average cathode current	110 mA	HorizontalDeflectionAmplifier
Screen input	2.5 W	HorizontalDeflectionAmplifier
Plate dissipation	10 W	HorizontalDeflectionAmplifier
Maximum plate voltage	300 V	VoltageRegulatorService;TriodeConnection
Maximum negative grid-bias magnitude	125 V	VoltageRegulatorService;TriodeConnection
Maximum cathode current	110 mA	VoltageRegulatorService;TriodeConnection
Plate plus screen dissipation	10 W	VoltageRegulatorService;TriodeConnection

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current 1	-25 A	Published in approved 6AU5GT target entry; Section1
DC Plate Voltage	550 V	Published in approved 6AU5GT target entry; Section1
Peak Negative-Pulse Plate Voltage	1250 V	Published in approved 6AU5GT target entry; Section1
DC Grid-No. 2 (Screen-Grid) Voltage"	200 V	Published in approved 6AU5GT target entry; Section1
Peak Negative-Pulse Grid-No.1 (Control-Grid) Voltage	300 V	Published in approved 6AU5GT target entry; Section1
Peak Cathode Current	400 mA	Published in approved 6AU5GT target entry; Section1
Average Cathode Current	110 mA	Published in approved 6AU5GT target entry; Section1
Grid-No.2 Input	2.5 W	Published in approved 6AU5GT target entry; Section1
Plate Dissipationft	10 W	Published in approved 6AU5GT target entry; Section1
Grid-No.1-Circuit Resistance	0.47 MΩ	Published in approved 6AU5GT target entry; Section1
Heater Voltage (ac/dc) 3.15 4.2 6.3	12.6 V	Published in approved 6AU5GT target entry; Section1
Heater Current 0.6 0.45 0.3	150 mA	Published in approved 6AU5GT target entry; Section1
age) 11 11	11 seconds	Published in approved 6AU5GT target entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.6 pF	Published in approved 6AU5GT target entry; Section1
Grid No.1 to Cathode, Heater, Grid No.2, and Grid No.3	11.3 pF	Published in approved 6AU5GT target entry; Section1
Plate to Cathode, Heater, Grid No.2, and Grid No.3	1 pF	Published in approved 6AU5GT target entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 115	110 V	Published in approved 6AU5GT target entry; Section1
Grid-No.2 (Screen-Grid) Voltage 17B	100 V	Published in approved 6AU5GT target entry; Section1
Grid-No.1 (Control-Grid) Voltage -20	-4.5 V	Published in approved 6AU5GT target entry; Section1
Plate Resistance	6000 Ω	Published in approved 6AU5GT target entry; Section1
Plate Current	60 mA	Published in approved 6AU5GT target entry; Section1
Grid No.2 Current	6.8 mA	Published in approved 6AU5GT target entry; Section1