



ELECTRONIC TUBE REFERENCE

6BG6G

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Glass beam-power pentode developed for television horizontal-deflection and RF power service, with approximately 20 W plate dissipation and strong multi-kilovolt pulse capability.

GENERAL CHARACTERISTICS

BASE DESIGNATION	5BT	BASE PINS	8
NOMINAL HEATER	6.3 V / 900 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

5BT - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – IS	A	IS – Internal Screen	CONNECTED
PIN2 – H	–	H – Heater	CONNECTED
PIN3 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN3 – K	A	K – Cathode	CONNECTED
PIN5 – G1	A	G1 – Control Grid	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – G2	A	G2 – Screen Grid	CONNECTED
CAP1 – P	A	P – Plate (Anode)	CONNECTED

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	25000 Ω
TRANSCONDUCTANCE	0.006 S
MAXIMUM PLATE VOLTAGE	700 V
MAXIMUM SCREEN VOLTAGE	350 V
MAXIMUM PLATE DISSIPATION	20 W
MAXIMUM SCREEN DISSIPATION	3.2 W
MAXIMUM CATHODE CURRENT	110 mA
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
<i>Published promoted fields populated semantically; identical repeated sections compressed where applicable.</i>	

Beam-power pentode for television horizontal-deflection and RF power service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DCPlateSupplyVoltage	700 V	HorizontalDeflection
PeakNegativePlateVoltage	1500 V	HorizontalDeflection
DC Plate Current	100 mA	HorizontalDeflection



SOURCE OPERATING CONDITIONS

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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	900 mA	—



195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	HorizontalDeflection; OperatingPoint1
Screen voltage	250 V	HorizontalDeflection; OperatingPoint1
Control-grid bias	15 V	HorizontalDeflection; OperatingPoint1
Plate current	75 mA	HorizontalDeflection; OperatingPoint1
Screen current	4 mA	HorizontalDeflection; OperatingPoint1
Plate voltage	60 V	HorizontalDeflection; OperatingPoint2
Screen voltage	250 V	HorizontalDeflection; OperatingPoint2
Control-grid bias	0 V	HorizontalDeflection; OperatingPoint2
Plate current	180 mA	HorizontalDeflection; OperatingPoint2
Screen current	18 mA	HorizontalDeflection; OperatingPoint2
Maximum positive pulse plate voltage	6600 V	HorizontalDeflection
Maximum plate dissipation	20 W	HorizontalDeflection
Maximum screen dissipation	3.2 W	HorizontalDeflection
Maximum DC cathode current	110 mA	HorizontalDeflection



SOURCE DATA APPENDIX

1961 Tung Sol

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

1961 TUNG SOL

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Positive Pulse Plate Voltage	6600 V	HorizontalDeflection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6000 uS	Typical



SOURCE DATA APPENDIX

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.

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HEATER VOLTAGE	3 V	Capacitances HEATER VOLTAGE 6;3 VOLTS

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABS. MAX.)	6600 V	Capacitances MAXIMUM PEAK POSITIVE PLATE VOLTAGE (ABS. MAX.) 6600 VOLTS
MAXIMUM PEAK NEGATIVE PLATE VOLTAGE	1500 V	Capacitances MAXIMUM PEAK NEGATIVE PLATE VOLTAGE 1500 VOLTS
MAXIMUM DC GRID #	350 V	Capacitances MAXIMUM DC GRID #2 VOLTAGE 350 VOLTS
MAXIMUM GRID #	3.2 W	Capacitances MAXIMUM GRID #2 DISSIPATION 3.2 WATTS
MAXIMUM GRID #	0.47 Mohm	Capacitances MAXIMUM GRID #1 CIRCUIT RESISTANCE 0.47 MEGOHM
HEATER VOLTAGE	6.3 V	Typical Operating Conditions HEATER VOLTAGE 6.3 voLTs
PLATE CURRENT]	5 mA	Typical Operating Conditions PLATE CURRENT]5 MA.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
GRID #	4 mA	Typical Operating Conditions GRID #2 CURRENT 4 MA.
PLATE RESISTANCE	0 ohm	Typical Operating Conditions PLATE RESISTANCE 25 000 OHMS
ZERO BIAS: WITH Eb	60 V	Typical Operating Conditions ZERO BIAS: WITH Eb =60V. & E cz 250V.(INSTANTANEOUS VALUES)
ZERO BIAS: WITH Eb	250 V	Typical Operating Conditions ZERO BIAS: WITH Eb =60V. & E cz 250V.(INSTANTANEOUS VALUES)
GRID #	8 mA	Typical Operating Conditions GRID #2 CURRENT I8 MA.
GRID #	45 V	Typical Operating Conditions GRID #1 VOLTAGE (APPROX.) —45 vOLTS

TUBE TINKER

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and their source documents.

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