



ELECTRONIC TUBE REFERENCE

12GC6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Heavy-duty beam-power tube for television horizontal-deflection output, rated for approximately 6.5 kV positive plate pulses and substantial peak cathode current.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8LX	BASE PINS	8
NOMINAL HEATER	12.6 V / 600 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	20000 Ω
TRANSCONDUCTANCE	0.0066 S
AMPLIFICATION FACTOR	4.1
MAXIMUM PLATE VOLTAGE	650 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	17.5 W
MAXIMUM SCREEN DISSIPATION	4.5 W
MAXIMUM CATHODE CURRENT	175 mA
<i>Horizontal-deflection pulse rating</i>	

High-perveance beam pentode for television horizontal-deflection amplifier service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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	12.6 V	—
Heater current	600 mA	—
Peak positive plate voltage	6500 V	HorizontalDeflection
Peak cathode current	550 mA	HorizontalDeflection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	15 pF	—



SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 3 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 3 OF 4

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC plate-supply voltage	770 V	HorizontalDeflection
Peak positive pulse plate voltage	6500 V	HorizontalDeflection
Peak negative pulse plate voltage	-1500 V	HorizontalDeflection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #2 voltage maximum	220 V	HorizontalDeflection
Peak negative grid #1 voltage	-330 V	HorizontalDeflection
Peak cathode current	550 mA	HorizontalDeflection
Average cathode current	175 mA	HorizontalDeflection
Plate voltage	250 V	AverageCharacteristics
Grid #2 voltage	150 V	AverageCharacteristics
Grid #1 voltage	-22.5 V	AverageCharacteristics
Plate current	75 mA	AverageCharacteristics
Grid #2 current	2.4 mA	AverageCharacteristics
Heater warm-up time	11 s	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	20000 ohm	AverageCharacteristics
Transconductance	6600 uS	AverageCharacteristics
Triode amplification factor	4.1	TriodeConnection

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1-to-plate capacitance	0.55 pF	—
Input capacitance	15 pF	—
Output capacitance	7 pF	—


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1968 General Electric Co

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1968 GENERAL ELECTRIC CO

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
DC Plate Supply Voltage	770 V	HorizontalDeflection
Peak Cathode Current	550 mA	HorizontalDeflection



SOURCE DATA APPENDIX

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	12.6 V	—
Heater current	600 mA	—
Maximum DC plate voltage	770 V	HorizontalDeflection
Peak positive-pulse plate voltage	6500 V	HorizontalDeflection
Peak negative-pulse plate voltage	-1500 V	HorizontalDeflection
Maximum screen voltage	220 V	HorizontalDeflection
Peak negative grid voltage	-330 V	HorizontalDeflection
Peak cathode current	550 mA	HorizontalDeflection
Average cathode current	175 mA	HorizontalDeflection
Screen input	4.5 W	—
Plate dissipation	17.5 W	—
Heater warm-up time	11 s	ControlledWarmup

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	150 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid voltage	-22.5 V	ClassA
Triode-connected amplification factor	4.1	TriodeConnection
Plate resistance	20000 ohm	ClassA
Transconductance	6600 uS	ClassA
Plate current	75 mA	ClassA
Screen current	2.4 mA	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.55 pF	—
Input capacitance	15 pF	—
Output capacitance	7 pF	—

TUBE TINKER

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