

ELECTRONIC TUBE REFERENCE

6GC6

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

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

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 1.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	20000 Ω
TRANSCONDUCTANCE	0.0066 S
AMPLIFICATION FACTOR	4.1
MAXIMUM PLATE VOLTAGE	770 V
MAXIMUM SCREEN VOLTAGE	220 V
MAXIMUM PLATE DISSIPATION	17.5 W
MAXIMUM SCREEN DISSIPATION	4.5 W
MAXIMUM CATHODE CURRENT	550 mA
Section 1 extracted from 6GC6.pdf.	

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

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current 1.2	600 mA	Heater Current 1.2 0.6 amp.
Total DC and Peak 200	200 V	Total DC and Peak 200 200 volts
Total DC and Peak 200	200 V	Total DC and Peak 200 200 volts
Plate Voltage	250 V	Plate Voltage 250 volts
Grid #2 Voltage	150 V	Grid #2 Voltage 150 volts
Plate Current	75 mA	Plate Current 75 ma.
Grid f Cwrent	24 mA	Grid f Cwrent 24 ma.
Plate Resistonce	20 Ω	Plate Resistonce 20,000 ohms
Grid #) Voltage (approx,) for b=1 mo, (approx.)	-46 V	Grid #) Voltage (approx,) for b=1 mo, (approx.) -46 volts
Plate Current	345 mA	Plate Current 345 ma.
Grid #2 Cuwrent	30 mA	Grid #2 Cuwrent 30 ma.

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid # Voltage	220 V	Grid # Voltage 220 volts
Grid #2 Dissipation	4.5 W	Grid #2 Dissipation 4.5 watts
Average Cathode Current	75 mA	Average Cathode Current 75 ma.
Peok Cothode Current	550 mA	Peok Cothode Current 550 ma.
Peok Positive Plate Vcltege	6500 V	Peok Positive Plate Vcltege 6500 volts
Peak Megative Plate Voltage	1500 V	Peak Megative Plate Voltage 1500 volts
Peak Negative Grid #] Yoltage	330 V	Peak Negative Grid #] Yoltage 330 volts



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	6.3 V	—
Heater current	1.2 A	—
Plate voltage	6500 V	Typical operating conditions
Screen voltage	220 V	Typical operating conditions
Plate current	75 mA	Typical operating conditions



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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 · Beam Power

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak positive pulse plate voltage	6500 V	Horizontal Deflection

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative pulse plate voltage	-1500 V	HorizontalDeflection
Peak cathode current	550 mA	HorizontalDeflection
Plate voltage	250 V	AverageCharacteristics
Screen voltage	150 V	AverageCharacteristics
Grid #1 voltage	-22.5 V	AverageCharacteristics
Plate current	75 mA	AverageCharacteristics
Screen current	2.4 mA	AverageCharacteristics

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode-connected amplification factor	4.1	TriodeConnection