

ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

12L6GT

1 SECTION
CONSTRUCTION
BEAMPOWER

Power - Beam (NOT sweep) electronic tube

Beam pentode for 600 mA series-heater receivers, designed as a sensitive output tube capable of useful audio power from relatively low supply voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AC	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

7AC - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – Pin 1	–	–	NC · verified
PIN2 – Pin 2	–	H – Heater	CONNECTED · verified
PIN3 – Pin 3	A	P – Plate (Anode)	CONNECTED · verified
PIN4 – Pin 4	A	G2 – Screen Grid	CONNECTED · verified
PIN5 – Pin 5	A	G1 – Control Grid	CONNECTED · verified
PIN7 – Pin 7	–	H – Heater	CONNECTED · verified
PIN8 – Pin 8	A	BP – Beam-Forming Plate	CONNECTED · verified
PIN8 – Pin 8	A	K – Cathode	CONNECTED · verified

SECTION RATINGS

SECTION1 Beam Power	
PLATE RESISTANCE	28000 Ω
TRANSCONDUCTANCE	0.008 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	1.25 W
<i>Published ratings/characteristics promoted where semantically applicable.</i>	

Beam pentode for 600 mA series-heater receivers, providing high power sensitivity at low supply voltage.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	15 pF	—
Output capacitance	10 pF	—
Grid-to-plate capacitance	0.8 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	ClassA
Screen voltage	125 V	ClassA
Cathode resistor	180 ohm	ClassA
Screen current	2.2 mA	ClassA
Load resistance	4000 ohm	ClassA
Power output	3.8 W	ClassA
Plate voltage	110 V	ClassA
Screen voltage	110 V	ClassA
Grid voltage	-7.5 V	ClassA
Plate current	49 mA	ClassA
Screen current	4 mA	ClassA
Load resistance	2000 ohm	ClassA;PlateVoltage=110V
Power output	2.1 W	ClassA;PlateVoltage=110V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	13000 ohm	ClassA;PlateVoltage=110V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	8000 μ S	ClassA;PlateVoltage=110V


SOURCE DATA APPENDIX

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	Nominal


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.8 pF	—
Input capacitance	15 pF	—
Output capacitance	9 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	ClassA

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	9500 μ S	ClassA
Plate resistance	30000 Ω m	ClassA



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
Plate voltage	200 V	ClassA
Grid #2 voltage	125 V	ClassA
Cathode-bias resistor	180 Ω m	ClassA
Zero-signal plate current	46 mA	ClassA
Maximum-signal plate current	48 mA	ClassA
Zero-signal grid #2 current	2.2 mA	ClassA
Maximum-signal grid #2 current	8.5 mA	ClassA
Load resistance	4000 Ω m	ClassA
Total harmonic distortion	10 %	ClassA
Power output	3.8 W	ClassA
Heater warm-up time	11 s	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	25000 Ω m	ClassA
Transconductance	8000 μ S	ClassA