



ELECTRONIC TUBE REFERENCE

6B5

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TRIODE

Direct-coupled twin-triode power amplifier for Class-A audio-frequency output service, using internally related input and output sections to develop bias and deliver power efficiently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	6AS	BASE PINS	6
NOMINAL HEATER	6.3 V / 800 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	24100 Ω
TRANSCONDUCTANCE	0.0024 S
AMPLIFICATION FACTOR	58
MAXIMUM PLATE VOLTAGE	325 V
<i>Published static characteristics are given for the combined dynamic-coupled structure.</i>	

SECTION2 Triode	
TRANSCONDUCTANCE	0.0024 S
AMPLIFICATION FACTOR	58
MAXIMUM PLATE VOLTAGE	325 V
<i>Electrical section reconstructed from published ratings/characteristics; transconductance promoted in A/V.</i>	

Indirectly heated direct-coupled power-amplifier triode for Class A audio-frequency service.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1937 Raytheon Radio Receiving Tubes

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
'r Maximum Plate Voltage	325 V	Published table
Output-Plate Voliage	250 V	ClassA; Column1
Output-Plate Voliage	300 V	ClassA; Column2
Output-Plate Voliage	325 V	ClassA; Column3
Input-Plate Voltage	250 V	ClassA; Column1
Input-Plate Voltage	300 V	ClassA; Column2
Input-Plate Voltage	325 V	ClassA; Column3
Amplification Factor	58	ClassA
Transconductance	2400 uS	ClassA
Output-Plate Current	33 mA	ClassA; Column1
Output-Plate Current	45 mA	ClassA; Column2
Output-Plate Current	51 mA	ClassA; Column3
Input-Plate Current	6.5 mA	ClassA; Column1
Input-Plate Current	8 mA	ClassA; Column2
Load Resistance	7000	ClassA; Column1
Load Resistance	7000	ClassA; Column2
Load Resistance	7000	ClassA; Column3
Signal Voltage RMS	13.5 V	ClassA; Column1
Signal Voltage RMS	15 V	ClassA; Column2
Output-Plate Voltage	250 V	ClassA; Column1
Output-Plate Voltage	300 V	ClassA; Column2
Output-Plate Voltage	325 V	ClassA; Column3

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output-Plate Current (per tube)	35 mA	ClassA; Column1
Output-Plate Current (per tube)	45 mA	ClassA; Column2
Output-Plate Current (per tube)	51 mA	ClassA; Column3
Input-Plate Current (per tube)	645 mA	ClassA; Column1
Input-Plate Current (per tube)	8 mA	ClassA; Column2
Input-Plate Current (per tube)	9 mA	ClassA; Column3
Load Resistance (r _{late} to plate)	10000 ohm	ClassA; Column1
Load Resistance (r _{late} to plate)	10000 ohm	ClassA; Column2
Load Resistance (r _{late} to plate)	10000 ohm	ClassA; Column3
Power Output	8.5 W	ClassA; Column1
Power Output	10 W	ClassA; Column2
Power Output	13.5 W	ClassA; Column3
Signal Voltage RMS (grid to grid)	38 V	ClassA; Column1
Signal Voltage RMS (grid to grid)	38 V	ClassA; Column2
Signal Voltage RMS (grid to grid)	42 V	ClassA; Column3
OUTPUT SECTION	6	ClassA
o &—' Y ouTPUT—	0	ClassA; Column1
o &—' Y ouTPUT—	3	ClassA; Column2



SOURCE DATA APPENDIX

1938 Triadyne

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

1938 TRIADYNE
Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PlateCurrentOutput	45 mA	ClassA;OneTube;At 300 V
PlateCurrentInput	8 mA	ClassA;OneTube;At 300 V
Load Resistance	7000 ohm	ClassA;OneTube;At 300 V
Power Output	4 W	ClassA;OneTube;At 300 V
Power Output	10 W	PushPull;ClassA;TwoTubes;At 300 V



SOURCE DATA APPENDIX

1950 Sylvania

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

1950 SYLVANIA
Section 2 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension de chauffage (CA. ou CC.) o 6,3 volts	6.3 V	Tension de chauffage (CA. ou CC.) o 6,3 volts
Courant de chauffage i v r 4 0,8 ampère	800 mA	Courant de chauffage i v r 4 0,8 ampère
Tension de chauffage 6,3 volts	6.3 V	Tension de chauffage 6,3 volts
Tension grille (entrée) v o 0 volt	0 V	Tension grille (entrée) v o 0 volt
Courant plaque (sortie) oo e 42 ma.	42 mA	Courant plaque (sortie) oo e 42 ma.
Courant plaque (entrée) v ... 9 ma,	9 mA	Courant plaque (entrée) v ... 9 ma,

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Résistance interne 24,000 ohms	24 ohms	Résistance interne 24,000 ohms
Conductance mutuelle* 2,400 ymhos	2.4 ymhos	Conductance mutuelle* 2,400 ymhos
Puissance de sortie** 4 watts	4 W	Puissance de sortie** 4 watts
Puissance de sortie*** ., e e 6,5 watts	6.5 W	Puissance de sortie*** ., e e 6,5 watts
capacité. La charge optimum pour un seul tube est 7.000 ohms.	7 ohms	capacité. La charge optimum pour un seul tube est 7.000 ohms.
tation de 300 volts. Cependant, on peut élever la tension jusqu'a	300 V	tation de 300 volts. Cependant, on peut élever la tension jusqu'a

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension de plaque (sortie) 300 volts max.	300 V	Tension de plaque (sortie) 300 volts max.
Tension plaque (entrée) 300 volts max.	300 V	Tension plaque (entrée) 300 volts max.



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate supply voltage	300 V	ClassA
Input plate voltage	300 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid voltage	0 V	ClassA
Plate current	45 mA	ClassA
Input plate current	8 mA	ClassA
Load resistance	7000 ohm	ClassA
Power output	4 W	ClassA



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	800 mA	—
Plate current	33 mA	Typical operating conditions

1961 TUNG SOL

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	800 mA	—
Plate current	33 mA	Typical operating conditions

TUBE TINKER

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