

ELECTRONIC TUBE REFERENCE

6Z7G

Power - Triode electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Dual power triode developed for Class B push-pull audio amplification at relatively low supply voltage. Its two sections operate together at zero grid bias to provide economical receiver and small-amplifier output power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8B	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM CATHODE CURRENT	60 mA
Published handbook ratings and representative operating characteristics reviewed.	

SECTION2 Triode	
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM PLATE DISSIPATION	8 W
MAXIMUM CATHODE CURRENT	60 mA
Second identical physical triode section; added to align rows with SectionCount.	

Class-B power amplifier consisting of two triodes in one envelope. The French-language source has been translated to English.

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
Peak plate current maximum	60 mA	EachSection
Plate voltage	135 V	ClassB;PushPull;TwoTubes
Control-grid voltage	0 V	ClassB;PushPull;TwoTubes
No-signal plate current per plate	3 mA	ClassB;PushPull;TwoTubes
Load resistance plate-to-plate	15000 Ω	ClassB;PushPull;TwoTubes
Power output	1.5 W	ClassB;PushPull;TwoTubes
Plate voltage	180 V	ClassB;PushPull;TwoTubes
Control-grid voltage	0 V	ClassB;PushPull;TwoTubes
No-signal plate current per plate	4.2 mA	ClassB;PushPull;TwoTubes
Load resistance plate-to-plate	20000 Ω	ClassB;PushPull;TwoTubes
Power output	2.2 W	ClassB;PushPull;TwoTubes
Alternate load resistance	12000 Ω	ClassB;PushPull;TwoTubes;HigherDrive
Alternate power output	4.2 W	ClassB;PushPull;TwoTubes;HigherDrive

1938 Raytheon

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

1938 RAYTHEON

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Current	3 A	Heater Current 03 amp
Mazimum Plate Voltage	180 V	Mazimum Plate Voltage 180 volts
Max, Average Plate Dissipation	8 W	Max, Average Plate Dissipation 8 watts
Plate Voltage 138	180 V	Plate Voltage 138 180 volts
Grid Bias 0	0 V	Grid Bias 0 0 volts
No Signal Plate Current (per plate) 3	4.2 mA	No Signal Plate Current (per plate) 3 4,2 ma
Power Output 1.5	2.2 W	Power Output 1.5 2.2 watts
Load Resistance 9000	12000 Ω	Load Resistance 9000 12000 ohms
Power Output 2.5	4.2 W	Power Output 2.5 4,2 watts



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 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	4.2 W	ClassB;PlateVoltage=180V



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
Maximum plate voltage	180 V	Published handbook rating
Plate voltage	180 V	ClassB PushPull TwoTubes
Control-grid bias	0 V	ClassA
Plate current	4.2 mA	ClassA
Load resistance	12000 ohm	ClassB PushPull TwoTubes
Power output	4.2 W	ClassB PushPull TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



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	Nominal
Heater current	300 mA	Nominal
Plate voltage	135 V	ClassB; OperatingPoint1
Effective load resistance plate-to-plate	15000 ohm	ClassB; OperatingPoint1
Average grid-to-grid power input	80 mW	ClassB; OperatingPoint1
Power output	1.5 W	ClassB; OperatingPoint1
Plate voltage	135 V	ClassB; OperatingPoint2
Effective load resistance plate-to-plate	9000 ohm	ClassB; OperatingPoint2
Average grid-to-grid power input	320 mW	ClassB; OperatingPoint2
Power output	2.5 W	ClassB; OperatingPoint2
Plate voltage	180 V	ClassB; OperatingPoint3
Effective load resistance plate-to-plate	20000 ohm	ClassB; OperatingPoint3
Average grid-to-grid power input	80 mW	ClassB; OperatingPoint3
Power output	2.2 W	ClassB; OperatingPoint3
Plate voltage	180 V	ClassB; OperatingPoint4
Effective load resistance plate-to-plate	12000 ohm	ClassB; OperatingPoint4
Average grid-to-grid power input	320 mW	ClassB; OperatingPoint4
Power output	4.2 W	ClassB; OperatingPoint4

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to cathode	4 pF	Per identical triode
Plate to cathode	5 pF	Per identical triode
Grid to plate	5 pF	Per identical triode
Grid to grid	0.22 pF	Cross-section capacitance
Plate to plate	0.8 pF	Cross-section capacitance

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 2 to plate 1	0.1 pF	Cross-section capacitance