



ELECTRONIC TUBE REFERENCE

6J8G

Voltage - Triode (with diode, heptode or hexode) electronic tube

CONSOLIDATED TECHNICAL
DATA

2 SECTIONS
CONSTRUCTION
HEPTODE-TRIODE

Triode-heptode frequency changer for superheterodyne receivers. The triode serves as local oscillator while the heptode mixer provides very high plate resistance for strong isolation at the converter output.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	10600 Ω
TRANSCONDUCTANCE	0.0016 S
AMPLIFICATION FACTOR	17
MAXIMUM PLATE VOLTAGE	300 V
<i>Published maximum ratings, characteristics, operating conditions and capacitances reviewed.</i>	

SECTION2 Heptode	
PLATE RESISTANCE	2500000 Ω
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
<i>Published maximum ratings, characteristics, operating conditions and capacitances reviewed.</i>	

Triode-heptode converter combining an oscillator triode and pentagrid mixer with a common cathode for frequency-conversion 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 2 · Heptode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	250 V	Published datasheet rating
Maximum screen voltage	100 V	Published datasheet rating
Plate voltage	250 V	ClassA
Screen voltage	100 V	ClassA
Screen current	2.8 mA	ClassA
Maximum triode plate supply voltage	250 V	Oscillator TriodeSection
Mixer plate voltage	250 V	HeptodeSection
Mixer screen voltage	100 V	HeptodeSection
Oscillator plate voltage	250 V	TriodeSection
Mixer screen current	2.8 mA	HeptodeSection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	4000000 ohm	Published datasheet characteristic
Transconductance	290 μ S	Published datasheet characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating
Mixer plate resistance	4000000 ohm	HeptodeSection
Conversion transconductance	290 μ S	Converter

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
Plate Resistance	10600 ohm	—
Transconductance	1600 μ S	—
Amplification Factor	17	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	250 V	—
Plate Voltage	100 V	Triode oscillator section

1950 SYLVANIA

Section 2 · Heptode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	4000000 ohm	—
Conversion Conductance	290 μ S	Heptode mixer; 250 V plate

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	250 V	—
Maximum Screen Voltage	100 V	—
Plate Current	1.3 mA	Heptode mixer; 250 V plate



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 2 · Heptode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	100 V	Published handbook rating
Plate voltage	250 V	ClassA
Screen voltage	100 V	ClassA
Control-grid bias	3 V	ClassA
Plate current	1.3 mA	ClassA
Screen current	3.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	2500000 ohm	Published handbook characteristic
Transconductance	290 μS	Published handbook characteristic
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating



TUBE TINKER
ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1600 uS	Published operating/characteristic table

1961 TUNG SOL

Section 2 · Heptode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1600 uS	Published operating/characteristic table

TUBE TINKER

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and their source documents.

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