



ELECTRONIC TUBE REFERENCE

1D8GT

Voltage - Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-PENTODE-TRIODE

Directly heated diode-triode-power-pentode combination for battery receivers; the pentode provides low-power audio output while the diode and triode handle signal functions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8AJ	BASE PINS	8
NOMINAL HEATER	1.4 V / 100 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode

No fixed ratings recorded.

Detector diode at negative end of common filament; independent of triode and pentode except common filament.

SECTION2 Triode

PLATE RESISTANCE	77000 Ω
TRANSCONDUCTANCE	0.000325 S
AMPLIFICATION FACTOR	25
MAXIMUM PLATE VOLTAGE	110 V

Promoted characteristics use first listed Class A1 condition.

SECTION3 Pentode	
PLATE RESISTANCE	300000 Ω
TRANSCONDUCTANCE	0.00065 S
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM SCREEN VOLTAGE	110 V
MAXIMUM CATHODE CURRENT	6 mA
<i>Promoted characteristics use first listed Class A1 pentode condition.</i>	

Directly heated combination tube containing a diode, a triode, and a power-amplifier pentode.

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 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	110 V	—
Plate voltage	90 V	ClassA
Control-grid voltage	0 V	ClassA
Plate current	1.1 mA	ClassA
Plate resistance	43500 Ohm	ClassA
Transconductance	575 uS	ClassA
Amplification factor	25	ClassA

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	110 V	—
Maximum screen-grid voltage	110 V	—
Plate voltage	90 V	ClassA
Screen-grid voltage	90 V	ClassA
Control-grid voltage	-9 V	ClassA
Plate current	5 mA	ClassA
Screen-grid current	1 mA	ClassA
Plate resistance	200000 Ohm	ClassA
Transconductance	925 uS	ClassA
Load resistance	12000 Ohm	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power output	0.2 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 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum Diode Current	0.5 mA	DcApplied=40V

1961 TUNG SOL

Section 2 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	1.4 V	Nominal
Filament Current	100 mA	Nominal
Plate Voltage	45 V	ClassA1;Triode;PlateVoltage=45V
Grid Voltage	0 V	ClassA1;Triode;PlateVoltage=45V
Plate Current	0.3 mA	ClassA1;Triode;PlateVoltage=45V
Plate Voltage	67.5 V	ClassA1;Triode;PlateVoltage=67.5V
Grid Voltage	0 V	ClassA1;Triode;PlateVoltage=67.5V
Plate Current	0.6 mA	ClassA1;Triode;PlateVoltage=67.5V
Plate Voltage	90 V	ClassA1;Triode;PlateVoltage=90V
Grid Voltage	0 V	ClassA1;Triode;PlateVoltage=90V
Plate Current	1.1 mA	ClassA1;Triode;PlateVoltage=90V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	77000 ohm	ClassA1;Triode;PlateVoltage=45V
Transconductance	325 uS	ClassA1;Triode;PlateVoltage=45V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Amplification Factor	25	ClassA1;Triode;PlateVoltage=45V
Plate Resistance	55500 ohm	ClassA1;Triode;PlateVoltage=67.5V
Transconductance	450 uS	ClassA1;Triode;PlateVoltage=67.5V
Amplification Factor	25	ClassA1;Triode;PlateVoltage=67.5V
Plate Resistance	43500 ohm	ClassA1;Triode;PlateVoltage=90V
Transconductance	575 uS	ClassA1;Triode;PlateVoltage=90V
Amplification Factor	25	ClassA1;Triode;PlateVoltage=90V

1961 TUNG SOL

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	45 V	ClassA1;Pentode;PlateVoltage=45V
Screen Voltage	45 V	ClassA1;Pentode;PlateVoltage=45V
Control Grid Voltage	-4.5 V	ClassA1;Pentode;PlateVoltage=45V
Plate Current	1.6 mA	ClassA1;Pentode;PlateVoltage=45V
Screen Current	0.3 mA	ClassA1;Pentode;PlateVoltage=45V
Load Resistance	20000 ohm	ClassA1;Pentode;PlateVoltage=45V
Total Harmonic Distortion	10 %	ClassA1;Pentode;PlateVoltage=45V
Power Output	35 mW	ClassA1;Pentode;PlateVoltage=45V
Plate Voltage	62.5 V	ClassA1;Pentode;PlateVoltage=62.5V
Screen Voltage	62.5 V	ClassA1;Pentode;PlateVoltage=62.5V
Control Grid Voltage	-5 V	ClassA1;Pentode;PlateVoltage=62.5V
Plate Current	3.8 mA	ClassA1;Pentode;PlateVoltage=62.5V
Screen Current	0.8 mA	ClassA1;Pentode;PlateVoltage=62.5V
Load Resistance	16000 ohm	ClassA1;Pentode;PlateVoltage=62.5V
Total Harmonic Distortion	10 %	ClassA1;Pentode;PlateVoltage=62.5V
Power Output	90 mW	ClassA1;Pentode;PlateVoltage=62.5V
Plate Voltage	67.5 V	ClassA1;Pentode;PlateVoltage=67.5V
Screen Voltage	67.5 V	ClassA1;Pentode;PlateVoltage=67.5V
Control Grid Voltage	-6 V	ClassA1;Pentode;PlateVoltage=67.5V
Plate Current	3.8 mA	ClassA1;Pentode;PlateVoltage=67.5V
Screen Current	0.8 mA	ClassA1;Pentode;PlateVoltage=67.5V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Load Resistance	16000 ohm	ClassA1;Pentode;PlateVoltage=67.5V
Total Harmonic Distortion	10 %	ClassA1;Pentode;PlateVoltage=67.5V
Power Output	100 mW	ClassA1;Pentode;PlateVoltage=67.5V

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	300000 ohm	ClassA1;Pentode;PlateVoltage=45V
Transconductance	650 uS	ClassA1;Pentode;PlateVoltage=45V
Plate Resistance	200000 ohm	ClassA1;Pentode;PlateVoltage=62.5V
Transconductance	875 uS	ClassA1;Pentode;PlateVoltage=62.5V
Plate Resistance	200000 ohm	ClassA1;Pentode;PlateVoltage=67.5V
Transconductance	875 uS	ClassA1;Pentode;PlateVoltage=67.5V

TUBE TINKER

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and their source documents.

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