

ELECTRONIC TUBE REFERENCE

8GN8

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode/pentode combination for television video, sound-IF, synchronization, and phase-inverter circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	NOVAL	BASE PINS	9
NOMINAL HEATER	8 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	37000 Ω
TRANSCONDUCTANCE	0.0027 S
AMPLIFICATION FACTOR	100
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
Published promoted fields populated semantically; identical repeated sections compressed.	

SECTION2 Pentode	
PLATE RESISTANCE	60000 Ω
TRANSCONDUCTANCE	0.0115 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	5 W
MAXIMUM SCREEN DISSIPATION	1.1 W
MAXIMUM HEATER-CATHODE VOLTAGE	200 V
WARM-UP TIME	11 s
<i>Published promoted fields populated semantically; identical repeated sections compressed.</i>	

High-mu triode and sharp-cutoff pentode for television sync, sound-IF, phase-inverter, and video-amplifier service.



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 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PentodeTransconductance	9000 μ S	Section2



SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	8 V	Rated heater condition
Heater current	600 mA	Rated heater condition

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cuit with other tubes having a heater current rating of	600 mA	cuit with other tubes having a heater current rating of 600 ma,, hec}tt=`r voltage surges across individual tu}3es are
Voltage(acordc)	8 V	Voltage(acordc) 6.3 $\pm$ 10% 8.0 Volts Platevoltage 330 330 max. Volts
Bulb	200 V	Bulb..... T-61/2 Plate Voltage ... ` ..., 250 60 200 Volts
Grid 2 Voltage	150 V	Grid 2 Voltage -- 150 150 Volts

Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	8 V	Rated heater condition
Heater current	600 mA	Rated heater condition



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1966 Tung Sol Electronic Tubes 2 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Grid 1 Voltage	-2 V	—
Plate Current	2 mA	—

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	200 V	—
Screen Voltage	150 V	—
Cathode Bias Resistor	100 ohm	—
Plate Current	25 mA	—
Screen Current	5.5 mA	—



SOURCE DATA APPENDIX

1975 RCA RC30

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

1975 RCA RC30
Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Warm-up Time (Average) –	11 s	Characteristic;PublishedValue1
Heater Warm-up Time (Average) –	11 s	Characteristic;PublishedValue2
Peak value	200 V	Characteristic;PublishedValue1
Peak value	200 V	Characteristic;PublishedValue2
Peak value	200 V	Characteristic;PublishedValue3
Average value	100 V	Characteristic;PublishedValue1
Average value	100 V	Characteristic;PublishedValue2
Average value	100 V	Characteristic;PublishedValue3
Plate Supply Voltage	250 V	Characteristic;PublishedValue1
Plate Supply Voltage	60 V	Characteristic;PublishedValue2
Plate Supply Voltage	200 V	Characteristic;PublishedValue3
Grid-No.1 Voltage –	2 V	Characteristic;PublishedValue1
Grid-No.1 Voltage –	0 V	Characteristic;PublishedValue2
Plate Resistance (Approx.)	37000 ohm	Characteristic;PublishedValue1
Plate Resistance (Approx.)	60000 ohm	Characteristic;PublishedValue2
Grid-No	2 mA	Characteristic;PublishedValue1
Grid-No	18 mA	Characteristic;PublishedValue2
Grid-No	5.5 mA	Characteristic;PublishedValue3
Grid Voltage (Approx.) for plate current of	20 V	Characteristic;PublishedValue1
Grid Voltage (Approx.) for plate current of	-5 V	Characteristic;PublishedValue2
Grid-No.1 Voltage (Approx.) for plate current	100 uA	Characteristic;PublishedValue1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 Voltage (Approx.) for plate current	-10 uA	Characteristic;PublishedValue2
Plate Resistance	37000 ohm	Section1
Transconductance	2700 uS	Section1
Amplification Factor	100	Section1

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	330 V	MaximumRating;PublishedValue1
Plate Voltage	330 V	MaximumRating;PublishedValue2
Grid-No	2 V	MaximumRating;PublishedValue1
Grid-No	330 V	MaximumRating;PublishedValue2
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 V	MaximumRating;PublishedValue1
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 V	MaximumRating;PublishedValue2
Plate Dissipation	1 W	MaximumRating;PublishedValue1
Plate Dissipation	5 W	MaximumRating;PublishedValue2
For grid-No	2 V	MaximumRating;PublishedValue1
For grid-No	165 V	MaximumRating;PublishedValue2
Published value	1.1 W	MaximumRating
For grid-No	2 V	MaximumRating;PublishedValue1
For grid-No	165 V	MaximumRating;PublishedValue2
For grid-No	330 V	MaximumRating;PublishedValue3
For grid-No	300 V	MaximumRating;PublishedValue4
For fixed-bias operation	0.5 megohm	MaximumCircuitValue;PublishedValue1
For fixed-bias operation	0.25 megohm	MaximumCircuitValue;PublishedValue2
For cathode-bias operation	1 megohm	MaximumCircuitValue;PublishedValue1
For cathode-bias operation	1 megohm	MaximumCircuitValue;PublishedValue2
Maximum Plate Voltage	330 V	Section1
Maximum Plate Dissipation	1 W	Section1

1975 RCA RC30

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	Section2
Maximum Screen Voltage	330 V	Section2
Maximum Plate Dissipation	5 W	Section2
Maximum Screen Dissipation	1.1 W	Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	60000 ohm	Section2
Transconductance	11500 uS	Section2

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