

ELECTRONIC TUBE REFERENCE

6JD6

Voltage - Pentode Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Frame-grid sharp-cutoff miniature pentode for television IF amplification around 40 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E9-1	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	160000 Ω
TRANSCONDUCTANCE	0.014 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.6 W
Published ratings/characteristics promoted from supplied datasheet.	

Sharp-cutoff frame-grid miniature pentode used as a television IF amplifier around 40 MHz.



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	125 V	Average characteristics
Screen Voltage	125 V	Average characteristics

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	15 mA	Average characteristics
Screen Current	4 mA	Average characteristics



SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	—
Screen-grid voltage	125 V	—
Cathode bias resistor	56 0hm	—
Plate current	15 mA	—
Screen-grid current	4 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	160000 Ohm	—
Transconductance	14000 uS	—
Control-grid cutoff voltage	-4.5 V	At600uS



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	300 mA	—
Plate Resistance	160000 ohm	—
Transconductance	14000 uS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Voltage	330 V	—
Maximum Plate Dissipation	2.5 W	—
Maximum Screen Supply Voltage	330 V	—
Maximum Screen Dissipation	0.6 W	—
Plate Voltage	125 V	—
Screen Voltage	125 V	—
Plate Current	15 mA	—
Screen Current	4 mA	—



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	IFAmplifier
Grid 2 voltage	125 V	IFAmplifier
Cathode bias resistor	56 ohm	IFAmplifier
Plate current	15 mA	IFAmplifier
Grid 2 current	4 mA	IFAmplifier



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 5 of 7

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

1971 RCA HB3 BINDER 5 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage (AC or DC) g,	3 V	Published table value column 1
Voltage (AC or DC) g,	0.6 V	Published table value column 2
Current at heater volts =	6.3 V	Published table value column 1
Current at heater volts =	0.3 V	Published table value column 2
respect to cathode	200 V	Published table value
Grid No	1 pF	Published table value column 1
Grid No	0.019 pF	Published table value column 2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	125 V	Published table value
Grid-No	3 V	Published table value column 1
Grid-No	0 V	Published table value column 2
Grid-No	2 V	Published table value column 1
Grid-No	125 V	Published table value column 2
Grid-No.1 Supply Voltage	0 V	Published table value
Cathode Resistor	56 Ω	Published table value
Plate Current	15 mA	Published table value
Grid-No	2 mA	Published table value column 1
Grid-No	4 mA	Published table value column 2
PLATE VOLTAGE	330 V	Published table value
GRID-No	2 V	Published table value column 1
GRID-No	330 V	Published table value column 2
GRID-N	2 a	Published table value
between	165 V	Published table value column 1
between	330 V	Published table value column 2
PLATE DISSIPATION	2 W	Published table value column 1
PLATE DISSIPATION	5 W	Published table value column 2
for cathode-bias operation	1 M Ω	Published table value
GRID-No	2 VOLTS	Published table value column 1
GRID-No	125 VOLTS	Published table value column 2
PLATE VOLTS=	125 VOLTS	Published table value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Approx)	160000 Ω	Published table value
Transconductance	14000 μS	Published table value
transconductance ($\mu mhos$) =	600 μS	Published table value column 1
transconductance ($\mu mhos$) =	-4.5 μS	Published table value column 2



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 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak value	200 V	Other;PublishedValue1
Peak value	200 V	Other;PublishedValue2
Average value	100 V	Other;PublishedValue1
Average value	100 V	Other;PublishedValue2
Plate Voltage	330 V	MaximumRating
Grid-No.3 (Suppressor-Grid) Voltage, Positive value	0 V	MaximumRating
Grid-No.2 (Screen-Grid) Supply Voltage	330 V	MaximumRating
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 V	MaximumRating
Plate Dissipation	2.5 W	MaximumRating
For grid-No.2 voltages up to 165 volts	0.6 V	MaximumRating
©2	0 V	MaximumRating;PublishedValue1
©2	5 V	MaximumRating;PublishedValue2
PLATE VOLTS	5 V	MaximumRating
For fixed-bias operation	0.25 megohm	MaximumCircuitValue
For cathode-bias operation	1 megohm	MaximumCircuitValue

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No.1 to Plate	0.019 pF	Capacitance
Internal Shield	8.2 pF	Capacitance

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Supply Voltage	125 V	Characteristic

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.3 Voltage	0 V	Characteristic
Grid-No.2 Supply Voltage	125 V	Characteristic
Grid-No.1 Supply Voltage	0 V	Characteristic
Cathode-Bias Resistor	56 ohm	Characteristic
Plate Resistance (Approx.)	160000 ohm	Characteristic
Transconductance	14000 uS	Characteristic
Plate Current	15 mA	Characteristic
Grid-No.2 Current	4 mA	Characteristic

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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