

ELECTRONIC TUBE REFERENCE

5EW6

Voltage - Pentode Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Sharp-cutoff pentode designed for television IF, picture-IF, video, or VHF tuner amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7CM	BASE PINS	7
NOMINAL HEATER	5.6 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

7CM - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – G1	A	G1 – Control Grid	CONNECTED
PIN2 – K	A	K – Cathode	CONNECTED
PIN3 – H	–	H – Heater	CONNECTED
PIN4 – H	–	H – Heater	CONNECTED
PIN5 – P	A	P – Plate (Anode)	CONNECTED
PIN6 – G2	A	G2 – Screen Grid	CONNECTED
PIN7 – G3	A	G3 – Suppressor Grid	CONNECTED
PIN7 – IS	A	IS – Internal Screen	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.014 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	3.1 W
MAXIMUM SCREEN DISSIPATION	0.65 W
<i>Sharp-cutoff pentode; 6EW6 electrical counterpart.</i>	

Sharp-cutoff pentode used in gain-controlled picture-IF stages of VHF color and black-and-white television receivers.



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
Heater voltage	5.6 V	—
Heater current	450 mA	—



SOURCE OPERATING CONDITIONS

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1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	5.6 V	—
Heater current	450 mA	—
Maximum screen supply voltage	330 V	—
Plate voltage	125 V	ClassA
Screen voltage	125 V	ClassA
Cathode bias resistor	56 ohm	ClassA
Plate current	11 mA	ClassA
Screen current	3 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	14000 μ S	ClassA
Plate resistance	0.2 M Ω m	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	—0.03 pF	WithShield; Maximum
Input capacitance	10 pF	—
Output capacitance	3.4 pF	WithShield



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA
Screen voltage	125 V	ClassA
Cathode resistor	56 Ω m	ClassA
Plate current	11 mA	ClassA
Screen current	3.2 mA	ClassA
Maximum plate voltage	330 V	—
Maximum screen voltage	330 V	—
Maximum plate dissipation	3.1 W	—
Maximum screen dissipation	0.65 W	—
Heater/filament voltage	5.6 V	DerivativeSheet
Heater/filament current	450 mA	DerivativeSheet
Heater warm-up time	11 s	ControlledWarmup

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	200000 ohm	ClassA
Transconductance	14000 uS	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.03 pF	—
Input capacitance	10 pF	—
Output capacitance	3.4 pF	—



SOURCE OPERATING CONDITIONS

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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
order of	40 MHz	Published in approved 6EW6 target entry; Section1
Heater Voltage (ac/dc) 5.6	6.3 V	Published in approved 6EW6 target entry; Section1
Heater Current 0.45	400 mA	Published in approved 6EW6 target entry; Section1
Heater Warm-up Time (Average)	11 seconds	Published in approved 6EW6 target entry; Section1
Plate Voltage	330 V	Published in approved 6EW6 target entry; Section1
Grid No.3 (Suppressor-Grid) Voltage, Positive value	0 V	Published in approved 6EW6 target entry; Section1
Grid-No.2 (Screen-Grid) Supply Voltage	330 V	Published in approved 6EW6 target entry; Section1
Grid-No.1 (Control-Grid) Voltage, Positive-bias value	0 V	Published in approved 6EW6 target entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Dissipation	3.1 W	Published in approved 6EW6 target entry; Section1
For grid-No.2 voltages up to	165 V	Published in approved 6EW6 target entry; Section1
For grid-No.2 voltages up to 165 volts	0.65 W	Published in approved 6EW6 target entry; Section1
For grid-No.2 voltages between 165 and	330 V	Published in approved 6EW6 target entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid No. 3, and Internal Shield . 10	10 pF	Published in approved 6EW6 target entry; Section1
Grid No.3, and Internal Shield 2.4	3.4 pF	Published in approved 6EW6 target entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.2 Supply Voltage	125 V	Published in approved 6EW6 target entry; Section1
Cathode-Bias Resistor	55 Ω	Published in approved 6EW6 target entry; Section1
Plate Resistance (Approx.)	0.2 MΩ	Published in approved 6EW6 target entry; Section1
Grid-No.1 Voltage (Approx.) for plate current of 20 μ A	3.5 V	Published in approved 6EW6 target entry; Section1

TUBE TINKER

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