

ELECTRONIC TUBE REFERENCE

6HM6

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Frame-grid sharp-cutoff pentode for high-gain television intermediate-frequency amplifier stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9PM	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

9PM - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	K – Cathode	CONNECTED
PIN2	–	G1 – Control Grid	CONNECTED
PIN3	–	K – Cathode	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN7	–	P – Plate (Anode)	CONNECTED
PIN8	–	G2 – Screen Grid	CONNECTED
PIN9	–	G3 – Suppressor Grid	CONNECTED
PIN9	–	IS – Internal Screen	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	156000 Ω
TRANSCONDUCTANCE	0.015 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.6 W
MAXIMUM CATHODE CURRENT	25 mA
<i>Promoted values are from the supplied Westinghouse family sheet; additional published ratings, characteristics and operating points are retained in TUBE_SECTION_PARAMETER.</i>	

The 6HM6 is a frame-grid, sharp-cutoff 9-pin miniature pentode designed for television intermediate-frequency amplifier stages.



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	Published operating/characteristic table
Screen Voltage	2 V	Published operating/characteristic table
Grid Voltage	-3 V	Published operating/characteristic table

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	13 mA	Published operating/characteristic table
Screen Current	3.2 mA	Published operating/characteristic table
Transconductance	15000 μ S	Published operating/characteristic table
Plate Resistance	0.156 ohm	Published operating/characteristic table



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 Ohm	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	13 mA	—
Screen-grid current	3.2 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	156000 Ohm	—
Transconductance	15000 uS	—
Control-grid cutoff voltage	-3 V	—
Hot input resistance	13500 Ohm	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.024 pF	Shielded
Input capacitance	8.7 pF	Shielded
Output capacitance	3 pF	Shielded



SOURCE DATA APPENDIX

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.024 pF	—
Input capacitance	8.7 pF	—
Output capacitance	3 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	ClassA1
Screen voltage	125 V	ClassA1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode resistor	56 ohm	ClassA1
Plate current	13 mA	ClassA1
Screen current	3.2 mA	ClassA1

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Hot input resistance	13000 ohm	At40MHz
Hot input capacitance	7.4 pF	At40MHz