

ELECTRONIC TUBE REFERENCE

6GS8

Voltage - Dual Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-PENTODE

Twin pentode with shared control electrodes designed for combined television sync and automatic-gain-control functions.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9FG	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Similar

9FG - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1	–	K – Cathode	CONNECTED
PIN2	–	G2 – Screen Grid	CONNECTED
PIN2	–	IS – Internal Screen	CONNECTED
PIN3	B	P – Plate (Anode)	CONNECTED
PIN4	–	H – Heater	CONNECTED
PIN5	–	H – Heater	CONNECTED
PIN6	B	G3 – Suppressor Grid	CONNECTED
PIN7	–	G1 – Control Grid	CONNECTED
PIN8	A	P – Plate (Anode)	CONNECTED
PIN9	A	G3 – Suppressor Grid	CONNECTED

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.0012 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	1.1 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Representative section for two electrically similar physical sections.</i>	

SECTION2 Pentode	
TRANSCONDUCTANCE	0.0012 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	1.1 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	12 mA
<i>Second physical pentode section; electrically identical twin section.</i>	

The 6GS8 is a twin pentode with separate plates and third grids but common screen, control grid, and cathode, intended for combined sync and AGC functions in 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	6.3 V	—
Heater current	300 mA	—
Plate voltage	100100 V	Typical operating conditions
Screen voltage	150 V	Typical operating conditions
Plate current	2 mA	Typical operating conditions

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

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 3 to plate capacitance	2 pF	—
Grid 1 total capacitance	6 pF	—
Grid 3 total capacitance	3.6 pF	—
Plate total capacitance	3 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	EachSectionSeparately

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen voltage	67.5 V	EachSectionSeparately
Plate current	2 mA	EachSectionSeparately

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid 3 transconductance	270 μS	EachSectionSeparately
Grid 1 cutoff voltage	-2 V	Ib=100uA

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