

ELECTRONIC TUBE REFERENCE

6FV8A

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Medium-mu triode plus sharp-cutoff pentode used as a combined oscillator and mixer in VHF television tuners.

GENERAL CHARACTERISTICS

BASE DESIGNATION	9FA	BASE PINS	9
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

9FA - TERMINAL PINOUT

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	5600 Ω
TRANSCONDUCTANCE	0.008 S
AMPLIFICATION FACTOR	45
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.3 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Triode vertical-deflection oscillator section.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	200000 Ω
TRANSCONDUCTANCE	0.0065 S
MAXIMUM PLATE VOLTAGE	330 V
MAXIMUM SCREEN VOLTAGE	330 V
MAXIMUM PLATE DISSIPATION	2.3 W
MAXIMUM SCREEN DISSIPATION	0.55 W
<i>Pentode general-purpose/IF amplifier section.</i>	

Reference/equivalence entry for a medium-mu triode plus sharp-cutoff pentode used as a combined oscillator and mixer in VHF television tuners.



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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	Vertical deflection oscillator	—

1961 TUNG SOL

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Service	General-purpose or IF amplifier	—



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	5600 ohm	—
Transconductance	8000 uS	—
Amplification factor	45	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	330 V	—
Maximum plate dissipation	2.3 W	—
Heater voltage	6.3 V	—
Heater current	450 mA	—
Typical plate voltage	125 V	—
Typical plate current	12 mA	—

1965 SYLVANIA ELECTRONIC TUBES VOL3
 Section 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	200000 ohm	—
Transconductance	6500 uS	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	330 V	—
Maximum plate dissipation	2.3 W	—
Maximum screen-grid dissipation	0.55 W	—
Heater voltage	6.3 V	—
Heater current	450 mA	—
Typical plate voltage	125 V	—
Typical screen-grid voltage	125 V	—
Typical plate current	12 mA	—



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.

Section 1 · Triode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.8 pF	Triode;WithoutShield
Input capacitance	2.8 pF	Triode;WithoutShield
Output capacitance	1.5 pF	Triode;WithoutShield

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak negative pulse grid voltage	250 V	VerticalDeflection
Peak cathode current	70 mA	VerticalDeflection
Plate voltage	125 V	Typical
Grid #1 voltage	-1 V	Typical
Plate current	12 mA	Typical
Heater warm-up time	11 s	BothSections

1966 TUNG SOL ELECTRONIC TUBES 2 OF 4

Section 2 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1-to-plate capacitance	0.02 pF	Pentode;WithoutShield
Input capacitance	5 pF	Pentode;WithoutShield
Output capacitance	2 pF	Pentode;WithoutShield

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	125 V	Typical
Screen voltage	125 V	Typical
Grid #1 voltage	-1 V	Typical
Plate current	12 mA	Typical
Screen current	4 mA	Typical

TUBE TINKER

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

