

ELECTRONIC TUBE REFERENCE

6SV7

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

DIODE-PENTODE

Diode plus sharp-cutoff RF pentode designed for AM detection, voltage amplification, and FM limiting below about 30 MHz. Its radio detector role is integral despite the sharp-cutoff amplifier section.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AZ	BASE PINS	8
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

7AZ - TERMINAL PINOUT

TERMINAL	SECTION	ELEMENT	STATUS
PIN1 – SH	A	SH – Internal Shield	CONNECTED
PIN2 – 1G1	A	G1 – Control Grid	CONNECTED
PIN3 – 1G3	A	G3 – Suppressor Grid	CONNECTED
PIN3 – K	A	K – Cathode	CONNECTED
PIN4 – 1G2	A	G2 – Screen Grid	CONNECTED
PIN5 – 2P	B	P – Plate (Anode)	CONNECTED
PIN6 – 1P	A	P – Plate (Anode)	CONNECTED
PIN7 – H	–	H – Heater	CONNECTED
PIN8 – H	–	H – Heater	CONNECTED

SECTION RATINGS

SECTION1 Diode

No fixed ratings recorded.

Published promoted fields populated from printed headings; identical repeated sections compressed.

SECTION2 Pentode

PLATE RESISTANCE	700000 Ω
TRANSCONDUCTANCE	0.0026 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2.3 W
MAXIMUM SCREEN DISSIPATION	0.6 W
MAXIMUM HEATER-CATHODE VOLTAGE	90 V

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Combined diode and sharp-cutoff RF pentode designed for AM detection, voltage amplification, and FM limiting below 30 MHz.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 2 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	6.5 pF	—
Output capacitance	6 pF	—
Grid-plate capacitance	0.004 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA; OperatingPoint1
Screen voltage	150 V	ClassA; OperatingPoint1
Grid voltage	-1 V	ClassA; OperatingPoint1
Plate current	7.5 mA	ClassA; OperatingPoint1
Screen current	2.8 mA	ClassA; OperatingPoint1
Plate voltage	100 V	ClassA; OperatingPoint2
Screen voltage	100 V	ClassA; OperatingPoint2
Grid voltage	-1 V	ClassA; OperatingPoint2
Plate current	3.7 mA	ClassA; OperatingPoint2
Screen current	1.4 mA	ClassA; OperatingPoint2

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1500000 ohm	ClassA; OperatingPoint1
Transconductance	3600 uS	ClassA; OperatingPoint1
Plate resistance	700000 ohm	ClassA; OperatingPoint2
Transconductance	2600 uS	ClassA; OperatingPoint2



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 · Diode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumDiodeCurrent	3 mA	Section1

1961 TUNG SOL

Section 2 · Pentode

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	0.004 pF	Section2;Maximum
Input Capacitance	6.5 pF	Section2
Output Capacitance	6 pF	Section2

TUBE TINKER

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and their source documents.

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