

ELECTRONIC TUBE REFERENCE

6SF7

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
DIODE-PENTODE

Diode-pentode combination for detector and voltage-amplifier service. The pentode provides useful gain and high output resistance while the diode supplies complementary detector or control-voltage rectification.

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	
PEAK INVERSE VOLTAGE	330 V
<i>Published promoted fields populated from printed headings; identical repeated sections compressed.</i>	

SECTION2 Pentode	
PLATE RESISTANCE	700000 Ω
TRANSCONDUCTANCE	0.00205 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	0.5 W
<i>Published promoted fields populated from printed headings; identical repeated sections compressed.</i>	

Combined diode and remote-cutoff pentode for detector and amplifier service.

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	300 V	Published handbook rating
Maximum screen voltage	100 V	Published handbook rating
Plate voltage	250 V	ClassA OperatingPoint1
Screen voltage	100 V	ClassA OperatingPoint1
Control-grid bias	1 V	ClassA OperatingPoint1
Plate current	12.4 mA	ClassA OperatingPoint1
Screen current	3.3 mA	ClassA OperatingPoint1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	700000 ohm	ClassA OperatingPoint1
Transconductance	2050 μ S	ClassA OperatingPoint1
Heater voltage	6.3 V	Published heater rating
Heater current	300 mA	Published heater rating

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 2 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PentodeTransconductance	2050 uS	Section2