



ELECTRONIC TUBE REFERENCE

1F7GH

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

3 SECTIONS

CONSTRUCTION

DIODE-DIODE-PENTODE

Directly heated double-diode pentode combining detector and control-voltage rectification with a high-resistance amplifier section. Its economical filament and low-current operation suit portable battery receiving equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AD	BASE PINS	8
NOMINAL HEATER	2 V / 60 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Common cathode	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Diode*No fixed ratings recorded.**Detector/AVC diode section 1.***SECTION2** Diode*No fixed ratings recorded.**Detector/AVC diode section 2.*

SECTION3 Pentode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.00065 S
MAXIMUM PLATE VOLTAGE	180 V
MAXIMUM SCREEN VOLTAGE	67.5 V
MAXIMUM PLATE DISSIPATION	0.4 W
MAXIMUM SCREEN DISSIPATION	0.05 W
<i>Pentode RF/IF amplifier section.</i>	

Directly heated duplex-diode sharp-cutoff pentode for detector and Class A 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 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	180 V	—
Maximum screen-grid voltage	67.5 V	—
Plate voltage	180 V	ClassA
Screen-grid voltage	67.5 V	ClassA
Control-grid voltage	-1.5 V	ClassA
Plate current	2.2 mA	ClassA
Screen-grid current	0.7 mA	ClassA
Plate resistance	1000000 Ohm	ClassA
Transconductance	650 uS	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	3.8 pF	—
Output capacitance	9.5 pF	—
Grid-to-plate capacitance	0.001 pF	—

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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MinimumDiodeCurrentAt10V	0.5 mA	DcApplied=10V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumDiodeCurrentContinuous	0.25 mA	ContinuousOperation

1961 TUNG SOL

Section 2 · Diode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MinimumDiodeCurrentAt10V	0.5 mA	DcApplied=10V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MaximumDiodeCurrentContinuous	0.25 mA	ContinuousOperation

1961 TUNG SOL

Section 3 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Filament Voltage	2 V	Nominal
Filament Current	60 mA	Nominal
Plate Voltage	180 V	RForIFAmplifier
Screen Voltage	67.5 V	RForIFAmplifier
Control Grid Voltage	-1.5 V	RForIFAmplifier
Plate Current	2.2 mA	RForIFAmplifier
Screen Current	0.7 mA	RForIFAmplifier

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid To Plate Capacitance	0.01 pF	Maximum
Input Capacitance	3.8 pF	—
Output Capacitance	9.5 pF	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	1000000 ohm	RForIFAmplifier
Transconductance	650 uS	RForIFAmplifier
TransconductanceAtControlGridMinus42V	20 uS	RForIFAmplifier

TUBE TINKER

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and their source documents.

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