

ELECTRONIC TUBE REFERENCE

3AF4A

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

UHF television-service triode for amplifier and oscillator applications in television tuner circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	E7-1	BASE PINS	7
NOMINAL HEATER	3.2 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	2100 Ω
TRANSCONDUCTANCE	0.0065 S
AMPLIFICATION FACTOR	13.5
MAXIMUM PLATE VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM CATHODE CURRENT	25 mA
PEAK INVERSE VOLTAGE	0.022 V
MAXIMUM HEATER-CATHODE VOLTAGE	50 V
Only heater data printed; source refers to 6AF4-A.	

UHF television-service triode for amplifier and oscillator applications. The supplied sheet explicitly prints 3AF4A with 3AF4.



SOURCE OPERATING CONDITIONS

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

CAPACITANCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid to plate capacitance	1.9 pF	—
Grid to cathode and heater capacitance	2.2 pF	—

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	150 V	UHF Oscillator
Plate dissipation	2.5 W	UHF Oscillator
Plate voltage	80 V	UHF Oscillator

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6500 μ S	UHF Oscillator
Amplification factor	13.5	UHF Oscillator
Plate resistance	2100 ohm	UHF Oscillator



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1965 Westinghouse Data Book

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

1965 WESTINGHOUSE DATA BOOK

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	3.2 V	—
Heater Current	450 mA	—
ControlledWarmupHeater	1 boolean	—
Heater Warmup Time	11 s	—
Grid To Plate Capacitance	1.5 pF	—
Input Capacitance	2 pF	—
Output Capacitance	1 pF	—
MaximumOperatingFrequency	500 MHz	UHF oscillator
Application	UHF local oscillator	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage Maximum	150 V	—
GridVoltageMaximum	-50 V	Negative
GridCurrentMaximum	5 mA	—
Plate Dissipation Maximum	2.5 W	—
Cathode Current Maximum	25 mA	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1966 Tung Sol Electronic Tubes 1 of 4

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

1966 TUNG SOL ELECTRONIC TUBES 1 OF 4

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	3.15 V	Published heater rating
Heater current	600 mA	Published heater rating

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	150 V	UHF Oscillator
Maximum plate dissipation	2.5 W	UHF Oscillator
Maximum grid current	2 mA	UHF Oscillator
Maximum cathode current	24 mA	UHF Oscillator


SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltageNominal	3.2 V	—
HeaterOrFilamentCurrentNominal	450 mA	—
Maximum Plate Voltage	150 V	—
Maximum Plate Dissipation	2.5 W	—
Maximum Peak Inverse Voltage	0.022 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance	2100 Ohm	—
Transconductance	6500 uS	—
Amplification Factor	13.5	—


SOURCE DATA APPENDIX

1971 RCA HB3 Binder 4 of 7

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

1971 RCA HB3 BINDER 4 OF 7

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Current – published value 1	450 mA	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Current – published value 2	30 mA	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Voltage (AC or DC) at heater – published value 1	0	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Voltage (AC or DC) at heater – published value 2	0	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Current – published value 1	0 mA	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Current – published value 2	600 A	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.
Current – published value 3	40 mA	Published datasheet value; multiple numbers on a row represent separate source limits or conditions.