

ELECTRONIC TUBE REFERENCE

6F4

Voltage - Triode (single high frequency) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Acorn UHF power triode for high-frequency RF service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7BR	BASE PINS	–
NOMINAL HEATER	6.3 V / 225 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	6000 Ω
TRANSCONDUCTANCE	0.006 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	3.5 W
MAXIMUM CATHODE CURRENT	30 mA
Acorn high-frequency triode for Class-A RF amplifier service.	

The RCA 6F4 is an acorn-type UHF power triode for RF amplification and oscillation at frequencies up to about 1200 MHz.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1956 RCA Transmitting Tubes

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

1956 RCA TRANSMITTING TUBES

Section 1 · Triode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Operating Frequency	1200 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 1 · Triode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	80 V	ClassA
Cathode resistor	105 ohm	ClassA
Plate current	13 mA	ClassA
Plate resistance	2900 ohm	ClassA
Transconductance	5800 uS	ClassA
Amplification factor	17	ClassA

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	1.9 pF	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output capacitance	0.6 pF	—
Grid-to-plate capacitance	1.8 pF	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	150 mA	—
Maximum Intended Frequency	1200 MHz	Oscillator service



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	225 mA	—
Maximum DC heater-cathode potential	80 V	—
Plate voltage	180 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid voltage	-2 V	ClassA
Plate current	10 mA	ClassA
Maximum oscillator frequency	1500 MHz	Oscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	6000 uS	ClassA
Amplification factor	20	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	1.9 pF	—
Grid-to-cathode capacitance	2 pF	—
Plate-to-cathode capacitance	0.6 pF	—