

ELECTRONIC TUBE REFERENCE

CF7

Voltage - Pentode High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

All-current high-frequency pentode for RF, IF, and audio-frequency voltage amplification, closely related to the AF7.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	13 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	2000000 Ω
TRANSCONDUCTANCE	0.0021 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	6 mA
Straight-characteristic RF pentode; promoted values from published nominal operating point.	

All-current high-frequency pentode, explicitly cross-referenced to AF7 for RF, IF, and audio amplifier use.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1938 Philips Miniwatt Vacuum Tube Catalog

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

1938 PHILIPS MINIWATT VACUUM TUBE CATALOG

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	Published table operating point
Plate current	3 mA	Published table operating point
Control-grid bias	2 V	Published table operating point
Screen voltage	100 V	Published table operating point
Screen current	1.1 mA	Published table operating point

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2100000 μS	Published table characteristic
Plate resistance	700000 ohm	Published table characteristic
Heater/filament voltage	13 V	Published heater/filament rating
Heater/filament current	200 mA	Published heater/filament rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.003 pF	Published table capacitance

1953 RFT Rundfunk Technik

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

1953 RFT RUNDFUNK TECHNIK

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	200 V	—
Screen-grid voltage	100 V	—
Cathode resistance	500 Ω	—
Transconductance	2.1 mA/V	—
Plate resistance	2 MΩ	—
Resistance-amplifier supply voltage	200 V	—
Voltage gain	135	—
Cold anode voltage maximum	550 V	—
Cold screen-grid voltage maximum	400 V	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	6.6 pF	—
Output capacitance	7.6 pF	—



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ELECTRON TUBE DATABASE

SOURCE DATA APPENDIX

195X Tunsgam

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

195X TUNSGRAM

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate voltage	200 V	—
Typical screen voltage	100 V	—
Typical plate current	3 mA	—
Maximum no-current anode voltage	550 V	—
Maximum heater-cathode voltage	125 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transconductance	0.0024 A/V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1999 Philips 0-D

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical plate current	3 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transconductance	2400 μ S	—

TUBE TINKER

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and their source documents.

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