



ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

AF3

1 SECTION
CONSTRUCTION
PENTODE

Voltage Pentode - Remote Cutoff (single) electronic tube

Indirectly heated variable-mu high-frequency pentode designed for gain-controlled RF and IF amplifier service. Its extended-control characteristic provides smooth automatic gain regulation in receiver signal stages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	P30	BASE PINS	8
NOMINAL HEATER	4 V / 650 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	1200000 Ω
TRANSCONDUCTANCE	0.0018 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	125 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.4 W
MAXIMUM CATHODE CURRENT	15 mA
Remote-cutoff RF pentode; promoted nominal characteristic set uses Va=200/250 V family data and Vg2=100 V.	

Indirectly heated variable-mu high-frequency pentode for gain-controlled RF and IF amplifier service.



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	250 V	—
Screen voltage	100 V	—
Screen current	2.6 mA	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1800 μ S	—
Remote-cutoff grid bias	-53 V	—
Grid-anode capacitance	0.003 pF	—



SOURCE OPERATING CONDITIONS

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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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	4 V	Published nominal value
Heater or filament current	650 mA	Published nominal value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1800 μ S	Published operating characteristic



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1959 Telefunken

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1959 TELEFUNKEN

Section 1 · Pentode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterOrFilamentVoltage	4 V	—
HeaterOrFilamentCurrent	1 A	—
CutoffCharacteristic	Variable μ	—
MaximumControlVoltage	-35 V	GainControl



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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195X Tunsgam

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195X TUNSGRAM

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Typical screen voltage	100 V	—
Typical plate current	8 mA	—
Maximum no-current anode voltage	550 V	—
Maximum screen no-current voltage	400 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum heater-cathode voltage	80 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transconductance	0.0028 A/V	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1999 Philips 0-D

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1999 PHILIPS 0-D

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4 V	—
Heater current	650 mA	—
Plate voltage	250 V	—
Screen/auxiliary voltage	100 V	—
Plate current	8 mA	—
Screen/auxiliary current	2.6 mA	—
Transconductance	1800 μ S	—
Plate resistance	1200000 ohm	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance	6.4 pF	—
Output capacitance	7.6 pF	—
Plate-grid capacitance maximum	0.003 pF	—