



ELECTRONIC TUBE REFERENCE

EF12

Voltage - Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Pentode designed for RF, IF, and AF amplification, with documented triode-connected operation as well. Its broad signal-amplifier capability spans several receiver and audio-frequency stages rather than a single specialized function.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 200 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	800000 Ω
TRANSCONDUCTANCE	0.0021 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Published ratings and characteristics promoted from the approved German source.</i>	

RF/IF/AF pentode with triode-connected operation.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	200 mA	Nominal
Maximum Plate Voltage	250 V	—
Maximum Screen Voltage	250 V	—
Maximum Plate Dissipation	2 W	—
Maximum Screen Dissipation	0.5 W	—
Maximum Cathode Current	20 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 μ S	Typical
Plate Resistance	800000 ohm	Typical



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1959 Telefunken

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

1959 TELEFUNKEN

Section 1 · Pentode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode-connected operation	Published	TriodeConnection

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1999 Philips E-Z

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

1999 PHILIPS E-Z

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	—
Heater current	200 mA	—
Typical plate voltage	250 V	—
Typical screen voltage	100 V	—
Typical grid voltage	-2 V	—
Typical plate current	3 mA	—
Typical screen current	1 mA	—
Transconductance	2100 μ S	—
Plate resistance	2 Mohm	—
Screen-grid amplification factor	25	—

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate capacitance	6.5 pF	—
Grid input capacitance	6.5 pF	—
Plate-grid capacitance maximum	0.002 pF	—
Grid-heater capacitance maximum	0.03 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode-connected maximum plate voltage	200 V	TriodeConnection

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes,
and their source documents.

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