



ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

AL5

1 SECTION

CONSTRUCTION

PENTODE

Power - Pentode (NOT beam) electronic tube

Four-volt high-sensitivity power pentode with manufacturer-published output characteristics. Its comparatively high sensitivity permits useful audio power with reduced drive voltage.

GENERAL CHARACTERISTICS

BASE DESIGNATION	P35	BASE PINS	8
NOMINAL HEATER	4 V / 2 A	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
PLATE RESISTANCE	22000 Ω
TRANSCONDUCTANCE	0.0085 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	275 V
MAXIMUM PLATE DISSIPATION	18 W
MAXIMUM SCREEN DISSIPATION	3 W
MAXIMUM CATHODE CURRENT	90 mA

4 V high-sensitivity power pentode. Electrical ratings and operating characteristics were extracted from the supplied 4-volt valve data table, including the published heater data and available section-level values.

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	275 V	—
Screen current	7 mA	—
Optimum load resistance	3500 ohm	—
Power output	8.8 W	—
Grid AC input voltage	8.2 V RMS	—
Maximum anode dissipation	18 W	—
Push-pull plate current	130 mA	PushPull
Push-pull screen current	21 mA	PushPull
Push-pull load resistance	4500 ohm	PushPull
Push-pull power output	19.5 W	PushPull

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	8500 μ S	—
Plate resistance	22000 ohm	—

1999 Philips 0-D

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

1999 PHILIPS 0-D

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	4 V	—
Heater current	2 A	—
Transconductance	8500 μ S	—
Plate resistance	22000 ohm	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	275 V	ClassA
Grid voltage	-14 V	ClassA
Plate current	72 mA	ClassA
Screen current	7 mA	ClassA
Output power	8.8 W	ClassA
Load resistance	3500 ohm	ClassA
Push-pull output power	19.5 W	PushPull;TwoTubes

TUBE TINKER

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