



ELECTRONIC TUBE REFERENCE

4699

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

High-transconductance audio power pentode providing roughly 8 W single-ended or 29 W push-pull output.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 1.5 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Pentode	
TRANSCONDUCTANCE	0.0145 S
AMPLIFICATION FACTOR	20
MAXIMUM PLATE VOLTAGE	425 V
MAXIMUM SCREEN VOLTAGE	425 V
MAXIMUM PLATE DISSIPATION	18 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	90 mA
<i>Philips high-transconductance output pentode with published Class-A, Class-AB, and triode-connected Class-AB operating data.</i>	

The Philips 4699 is a high-slope output pentode with about 14.5 mA/V transconductance and 6 W Class A output.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1957 Philips Receiving and Amplifying Tubes

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

1957 PHILIPS RECEIVING AND AMPLIFYING TUBES

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	—
Screen Voltage	250 V	—
Anode Current	72 mA	—
Screen Current	8 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	6 W	ClassA

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1963 Philips Electron Tubes Handbook V1

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Screen voltage	250 V	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Cathode resistor	90 ohm	ClassA
Plate current	72 mA	ClassA
Screen current	8 mA	ClassA
Load resistance	3.5 kOhm	ClassA
Power output	8 W	ClassA
Plate supply voltage	425 V	ClassAB; PushPull
Load resistance plate-to-plate	8 kOhm	ClassAB; PushPull
Power output	29 W	ClassAB; PushPull
Plate supply voltage	400 V	ClassAB; PushPull; TriodeConnection
Cathode resistor	175 ohm	ClassAB; PushPull; TriodeConnection
Load resistance plate-to-plate	5.5 kOhm	ClassAB; PushPull; TriodeConnection
Power output	13 W	ClassAB; PushPull; TriodeConnection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	14500 uS	ClassA
Plate resistance	20 kOhm	ClassA