

ELECTRONIC TUBE REFERENCE

C443

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Philips pentode with documented Class-A operating data and published output characteristics. Its manufacturer ratings support low-frequency power-amplifier service rather than ordinary small-signal operation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	A/0	BASE PINS	4
NOMINAL HEATER	4 V / 250 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	35000 Ω
TRANSCONDUCTANCE	0.0017 S
AMPLIFICATION FACTOR	60
MAXIMUM PLATE DISSIPATION	6 W
Published operating point, characteristic values and capacitance column reviewed.	

C443 is listed in the supplied valve table as a pentode. Published operating and characteristic values were transcribed from its target row.



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	300 V	Published table operating point
Plate current	20 mA	Published table operating point
Control-grid bias	25 V	Published table operating point
Screen voltage	200 V	Published table operating point
Optimum load resistance	15000 ohm	Published table operating point
Maximum plate dissipation	6 W	Published table rating

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1700000 μ S	Published table characteristic
Plate resistance	35000 ohm	Published table characteristic
Heater/filament voltage	4 V	Published heater/filament rating
Heater/filament current	250 mA	Published heater/filament rating



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.

1999 PHILIPS 0-D

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	300 V	Published datasheet value
Anode current	20 mA	Published datasheet value
Grid No.1 voltage	-25 V	Published datasheet value
Grid No.2 voltage	200 V	Published datasheet value
Grid No.2 current	4.5 mA	Published datasheet value
Cathode resistor	1000 Ω	ClassA
Grid No.2 resistor	20 k Ω	ClassA
Anode load resistance	15 k Ω	ClassA
Input voltage	18 V RMS	ClassA
Output power	2.8 W	ClassA; d=10%

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1.7 mA/V	Published datasheet value
Internal resistance	35 k Ω	Published datasheet value
Amplification factor	60	Published datasheet value