



ELECTRONIC TUBE REFERENCE

B442

Voltage - Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TETRODE

Philips tetrode documented in valve tables with published operating and characteristic values; available source material does not support a narrower functional category without speculation.

GENERAL CHARACTERISTICS

BASE DESIGNATION	AS/03S	BASE PINS	—
NOMINAL HEATER	4 V / 100 mA	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.0009 S
AMPLIFICATION FACTOR	350
<i>Published operating point, characteristic values and capacitance column reviewed.</i>	

B442 is listed in the supplied valve table as a tetrode. 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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	200 V	Published table operating point
Plate current	4.5 mA	Published table operating point
Control-grid bias	1 V	Published table operating point
Screen voltage	100 V	Published table operating point

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	900 μ S	Published table characteristic
Plate resistance	400000 ohm	Published table characteristic
Heater/filament voltage	4 V	Published heater/filament rating
Heater/filament current	100 mA	Published heater/filament rating

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.005 pF	Published table capacitance

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	200 V	Published datasheet value
Screen-grid voltage	100 V	Published datasheet value
Normal anode current	4.5 mA	Published datasheet value
Grid bias	-1 V	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	0.9 mA/V	Published datasheet value
Internal resistance	400 kΩ	Published datasheet value
Amplification factor	350	Published datasheet value
Anode-grid capacitance	0.005 pF	Published datasheet value

TUBE TINKER

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