



ELECTRONIC TUBE REFERENCE

E442S

Voltage - Tetrode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TETRODE

Philips indirectly heated tetrode for receiving equipment. Available source material confirms conventional tetrode operation but does not establish a narrower functional category.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	5
NOMINAL HEATER	4 V / 1 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Tetrode	
PLATE RESISTANCE	400000 Ω
TRANSCONDUCTANCE	0.0011 S
AMPLIFICATION FACTOR	400
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	60 V
<i>Philips indirectly heated tetrode amplifier variant with reduced screen voltage.</i>	

E442S is a Tetrode device in the supplied Philips literature. Philips indirectly heated tetrode amplifier variant with reduced screen voltage.



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	ClassA
Plate current	4 mA	ClassA
Grid bias	-2 V	ClassA
Screen voltage	60 V	ClassA
Screen current	0.5 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	1.1 mA/V	ClassA
Amplification factor	400	ClassA
Internal resistance	400000 ohm	ClassA

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.02 pF	—



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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Normal plate current	4 mA	—
Grid bias	-2 V	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum transconductance	1100 μ S	—
Anode-grid capacitance	0.02 pF	—

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