



ELECTRONIC TUBE REFERENCE

4617

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Directly heated telephone-service triode for preamplifier and output applications in professional communications equipment.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	2200 Ω
TRANSCONDUCTANCE	0.003 S
AMPLIFICATION FACTOR	6.6
<i>Published maximum ratings/general electrical characteristics promoted directly; pulse, RF, capacitance, cooling, and service-specific values retained in TUBE_SECTION_PARAMETER.</i>	

Telephone-service triode for preamplifier and output use.



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 · Triode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Telephone equipment / preamplifier	—



SOURCE OPERATING CONDITIONS

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1971 RCA HB3 Binder 6 of 7

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

1971 RCA HB3 BINDER 6 OF 7

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	40000 V	PromotedValue
Maximum plate dissipation	150000 W	PromotedValue
Maximum cathode/plate current	7.5 A	PromotedValue
Ceramic-Insulator Temperature	150 mA	Published datasheet value
Metal -Surface Temperature	100 mA	Published datasheet value
Water temperature from any outlet	70 mA	Published datasheet value

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater/filament voltage	1.5 V	Nominal operating value
Heater/filament current	1800 A	Nominal operating value
Minimum time to reach operating current	30	Published datasheet value
before plate voltage is applied	60 V	Published datasheet value
Grid to plate	160 pF	Published datasheet value
Minimum Storage Temperature	-65 degC	Published datasheet value
Through grid-cathode coolant course – published value 1	5	Published datasheet value
Through grid-cathode coolant course – published value 2	2	Published datasheet value
Peak Positive-Pulse Plate Voltage ^f	40000 V	Pulse
Peak Negative Grid Voltage	200 V	Published datasheet value
Peak Plate Current	500	Published datasheet value
Peak Cathode Current ⁹	750	Published datasheet value
DC Plate Current	5	Published datasheet value
DC Cathode Current ⁹ – published value 1	9	Published datasheet value
DC Cathode Current ⁹ – published value 2	7.5	Published datasheet value
Plate Input (Average)	200000 W	Published datasheet value
Plate Dissipation (Average)	150000 W	Published datasheet value
Nith duty factor of 0.01 and pulse duration of 25 microseconds – published value 1	0.01	Pulse
Nith duty factor of 0.01 and pulse duration of 25 microseconds – published value 2	25	Pulse
Peak Positive-Pulse Plate-to-Grid Voltage ^{f~h} 30000 35000 – published value 1	30000 V	Pulse
Peak Positive-Pulse Plate-to-Grid Voltage ^{f~h} 30000 35000 – published value 2	35000 V	Pulse

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Peak Cathode-to-Grid Voltageh – published value 1	60 V	Published datasheet value
Peak Cathode-to-Grid Voltageh – published value 2	70 V	Published datasheet value
Peak Plate Current – published value 1	310	Published datasheet value
Peak Plate Current – published value 2	400	Published datasheet value
Peak Cathode Current ₉ – published value 1	525	Published datasheet value
Peak Cathode Current ₉ – published value 2	680	Published datasheet value
DC Plate Current – published value 1	3	Published datasheet value
DC Plate Current – published value 2	4	Published datasheet value
DC Cathode Current ₉ – published value 1	5	Published datasheet value
DC Cathode Current ₉ – published value 2	2	Published datasheet value
DC Cathode Current ₉ – published value 3	6.8	Published datasheet value
Peak Driver Power Output – published value 1	250000 W	Published datasheet value
Peak Driver Power Output – published value 2	350000 W	Published datasheet value
Useful Peak Power Output – published value 1	5	Published datasheet value
Useful Peak Power Output – published value 2	8	Published datasheet value
red ac the peak -value level shoo ld not exceed 5%of the pulse du raci on	5	Pulse
Input Strap-Resonant Frequency – published value 1	90 MHz	Published datasheet value
Input Strap-Resonant Frequency – published value 2	120 MHz	Published datasheet value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output Strap-Resonant Frequency – published value 1	240 MHz	Published datasheet value
Output Strap-Resonant Frequency – published value 2	280 MHz	Published datasheet value
Grid to plate – published value 1	120 pF	Published datasheet value
Grid to plate – published value 2	180 pF	Published datasheet value
Note I: With 1800 amperes through filament	1800 A	Published datasheet value
NAME PLATE	11	Published datasheet value
LOWER RF 6GRID OUTPUT	6	Published datasheet value



SOURCE OPERATING CONDITIONS

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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 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	130 V	—
Plate current	25 mA	—
Transconductance	3 mA/V	—
Grid voltage	-8 V	—
Amplification factor	6.6	—
Plate resistance	2.2 kohm	—