



ELECTRONIC TUBE REFERENCE

ECF200

Voltage Triode Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

PENTODE-TRIODE

Triode-pentode combination for electronic signal service; available source material does not establish a narrower functional application confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 410 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Triode	
PLATE RESISTANCE	6000 Ω
TRANSCONDUCTANCE	0.0065 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	1.5 W
MAXIMUM CATHODE CURRENT	18 mA
Source-published values promoted where directly stated; additional values retained in parameter table.	

SECTION2 Pentode	
PLATE RESISTANCE	300000 Ω
TRANSCONDUCTANCE	0.0055 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.1 W
MAXIMUM SCREEN DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	20 mA
<i>Source-published values promoted where directly stated; additional values retained in parameter table.</i>	

Triode-pentode for television pulse processing and fixed-mu IF amplification.



SOURCE OPERATING CONDITIONS

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1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Triode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	410 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	1.5 W	Published maximum rating

1968 MAZDA BELVU

Section 2 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	410 mA	Published nominal value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	2.1 W	Published maximum rating
Application	Television pulse processing and IF amplification	Printed source application



1972 Philips Receiving Tubes

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1972 PHILIPS RECEIVING TUBES

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage V_{ϕ}	6.3 V	—
Heater current I_{ϕ}	410 mA	—



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1975 RCA RC30

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Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 275	275 V	Published in approved ECF200 target datasheet entry; Section1
0	0 V	Published in approved ECF200 target datasheet entry; Section1
Plate Dissipation 1.7	2.3 W	Published in approved ECF200 target datasheet entry; Section1
For grid-No.2 voltages up to	137.5 V	Published in approved ECF200 target datasheet entry; Section1
For grid-No.2 voltages between 137.5 and	275 V	Published in approved ECF200 target datasheet entry; Section1
20 11K -7	-6.5 V	Published in approved ECF200 target datasheet entry; Section1
Heater Voltage	6.3 V	Published in approved ECF200 target datasheet entry; Section1
Heater Current	410 mA	Published in approved ECF200 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pentode Grid No.1 to Triode Grid <	1.2 pF	Published in approved ECF200 target datasheet entry; Section1
Pentode Plate to Triode Plate <	1.5 pF	Published in approved ECF200 target datasheet entry; Section1
Plate Supply Voltage 550	550 V	Published in approved ECF200 target datasheet entry; Section1
Plate Voltage 250	250 V	Published in approved ECF200 target datasheet entry; Section1
Cathode Current 18	18 mA	Published in approved ECF200 target datasheet entry; Section1
Plate Dissipation 1.5	2.1 W	Published in approved ECF200 target datasheet entry; Section1
Grid-No. 2 Input	0.7 W	Published in approved ECF200 target datasheet entry; Section1
Grid-No. 1-Circuit Resistance 1	1 MΩ	Published in approved ECF200 target datasheet entry; Section1
* With a maximum duty factor of 0.18 and maximum pulse duration of	18 microseconds	Published in approved ECF200 target datasheet entry; Section1
Heater Voltage (ac/dc)	6.3 V	Published in approved ECF200 target datasheet entry; Section1
Heater Current	1.25 A	Published in approved ECF200 target datasheet entry; Section1

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
t _{ee} 125	125 V	Published in approved ECF200 target datasheet entry; Section1
Grid-No.2 Voltage	125 V	Published in approved ECF200 target datasheet entry; Section1
Plate Resistance (Appiox.) 6000	300000 Ω	Published in approved ECF200 target datasheet entry; Section1
Transconductance 6500	5500 μS	Published in approved ECF200 target datasheet entry; Section1
Plate Voltage 170	160 V	Published in approved ECF200 target datasheet entry; Section1
Grid-No.3 (Suppressor-Grid) Voltage	0 V	Published in approved ECF200 target datasheet entry; Section1
Grid-No.2 Voltage	135 V	Published in approved ECF200 target datasheet entry; Section1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 (Control-Grid) Voltage -1	-1.7 V	Published in approved ECF200 target datasheet entry; Section1
Transconductance 4800	14000 μS	Published in approved ECF200 target datasheet entry; Section1
Plate Current 8.6	13 mA	Published in approved ECF200 target datasheet entry; Section1
Grid-No.2 Current	5 mA	Published in approved ECF200 target datasheet entry; Section1

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to All Other Elements (except grid)	3 pF	Published in approved ECF200 target datasheet entry; Section1
Grid to All Other Elements (except plate)	2.5 pF	Published in approved ECF200 target datasheet entry; Section1
Plate to Grid	2 pF	Published in approved ECF200 target datasheet entry; Section1
Plate to All Other Elements (except grid No.1)	3.5 pF	Published in approved ECF200 target datasheet entry; Section1
Grid No.1 to All Other Elements (except plate)	6.5 pF	Published in approved ECF200 target datasheet entry; Section1
Grid No.1 to Cathode	4 pF	Published in approved ECF200 target datasheet entry; Section1
Plate to Grid No.1 <	6.5 pF	Published in approved ECF200 target datasheet entry; Section1
Grid No.1 to Grid No.2	1.8 pF	Published in approved ECF200 target datasheet entry; Section1
Pentode Grid No.1 to Triode Plate	15 pF	Published in approved ECF200 target datasheet entry; Section1

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Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage 275	275 V	Published in approved ECF200 target datasheet entry; Section2
0	0 V	Published in approved ECF200 target datasheet entry; Section2
Plate Dissipation 1.7	2.3 W	Published in approved ECF200 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
For grid-No.2 voltages up to	137.5 V	Published in approved ECF200 target datasheet entry; Section2
For grid-No.2 voltages between 137.5 and	275 V	Published in approved ECF200 target datasheet entry; Section2
20 11K -7	-6.5 V	Published in approved ECF200 target datasheet entry; Section2
Heater Voltage	6.3 V	Published in approved ECF200 target datasheet entry; Section2
Heater Current	410 mA	Published in approved ECF200 target datasheet entry; Section2
Pentode Grid No.1 to Triode Grid <	1.2 pF	Published in approved ECF200 target datasheet entry; Section2
Pentode Plate to Triode Plate <	1.5 pF	Published in approved ECF200 target datasheet entry; Section2
Plate Supply Voltage 550	550 V	Published in approved ECF200 target datasheet entry; Section2
Plate Voltage 250	250 V	Published in approved ECF200 target datasheet entry; Section2
Cathode Current 18	18 mA	Published in approved ECF200 target datasheet entry; Section2
Plate Dissipation 1.5	2.1 W	Published in approved ECF200 target datasheet entry; Section2
Grid-No. 2 Input	0.7 W	Published in approved ECF200 target datasheet entry; Section2
Grid-No. 1-Circuit Resistance 1	1 MΩ	Published in approved ECF200 target datasheet entry; Section2
* With a maximum duty factor of 0.18 and maximum pulse duration of	18 microseconds	Published in approved ECF200 target datasheet entry; Section2
Heater Voltage (ac/dc)	6.3 V	Published in approved ECF200 target datasheet entry; Section2
Heater Current	1.25 A	Published in approved ECF200 target datasheet entry; Section2

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
t _{ee} 125	125 V	Published in approved ECF200 target datasheet entry; Section2
Grid-No.2 Voltage	125 V	Published in approved ECF200 target datasheet entry; Section2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Resistance (Appiox.) 6000	300000 Ω	Published in approved ECF200 target datasheet entry; Section2
Transconductance 6500	5500 μS	Published in approved ECF200 target datasheet entry; Section2
Plate Voltage 170	160 V	Published in approved ECF200 target datasheet entry; Section2
Grid-No.3 (Suppressor-Grid) Voltage	0 V	Published in approved ECF200 target datasheet entry; Section2
Grid-No.2 Voltage	135 V	Published in approved ECF200 target datasheet entry; Section2
Grid-No.1 (Control-Grid) Voltage -1	-1.7 V	Published in approved ECF200 target datasheet entry; Section2
Transconductance 4800	14000 μS	Published in approved ECF200 target datasheet entry; Section2
Plate Current 8.6	13 mA	Published in approved ECF200 target datasheet entry; Section2
Grid-No.2 Current	5 mA	Published in approved ECF200 target datasheet entry; Section2

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate to All Other Elements (except grid)	3 pF	Published in approved ECF200 target datasheet entry; Section2
Grid to All Other Elements (except plate)	2.5 pF	Published in approved ECF200 target datasheet entry; Section2
Plate to Grid	2 pF	Published in approved ECF200 target datasheet entry; Section2
Plate to All Other Elements (except grid No.1)	3.5 pF	Published in approved ECF200 target datasheet entry; Section2
Grid No.1 to All Other Elements (except plate)	6.5 pF	Published in approved ECF200 target datasheet entry; Section2
Grid No.1 to Cathode	4 pF	Published in approved ECF200 target datasheet entry; Section2
Plate to Grid No.1 <	6.5 pF	Published in approved ECF200 target datasheet entry; Section2
Grid No.1 to Grid No.2	1.8 pF	Published in approved ECF200 target datasheet entry; Section2
Pentode Grid No.1 to Triode Plate	15 pF	Published in approved ECF200 target datasheet entry; Section2

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

Section 2 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage V_{ϕ}	6.3 V	Heater voltage V_{ϕ} 6.3 V
Heater current I_{ϕ}	410 mA	Heater current I_{ϕ} 410 mA