ELECTRONIC TUBE REFERENCE

EL503

Power - Pentode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

High-transconductance power pentode for sensitive, high-current audio-frequency output stages.

General characteristics

BASE DESIGNATION	9C18	**BASE PINS**	9
NOMINAL HEATER	6.3 V / 1.05 A	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Pentode

PLATE RESISTANCE	7700 Ω
TRANSCONDUCTANCE	0.023 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	300 V
MAXIMUM SCREEN DISSIPATION	6 W
MAXIMUM CATHODE CURRENT	200 mA

Published ratings and characteristics promoted where clearly stated; identical repeated sections compressed when applicable.

Power pentode for AF output amplification. Indirectly heated Mazda/Belvu receiving tube; descriptive text translated to English from the French source.

SOURCE OPERATING CONDITIONS

1968 Mazda Belvu

SOURCE PDF

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

1968 MAZDA BELVU

Section 1 · Pentode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Tension filament vf	**63 V**	—
Courant filament … Îf	**12 A**	—
Tension d'anode, à courant nul ……..…..…. Vabl	**550 V**	—
Tension d'anode ... –… Va	**300 V**	—
Tension de grille n°2, à courant nul … Vg bl	**550 V**	—
Tension de grille n°2 ... … Ve	**300 V**	—
Dissipation de grille n°2 … Pg	**6 W**	—
Dissipation de crète de gulle n° 2 … Pg,cer	**9 W**	—
Courant de cathode …… … IK	**200 mA**	—
Tension entre le filament et la cathode …… VIK	**100 V**	—

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Capacité d'entré@ …… mseenenennnnnnnnnnns Ce	**22.5 pF**	—
Capacité grille n° 1/anode …… s Cg,/ à	**2.2 pF**	—
Capacité de@ SOrti® ……s Cs	**12.6 pF**	—
Tension d'Anod@ …..…..…..…..…….cerercesrerereene VA	**250 V**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Tension de grille n°2... … Ve	**250 V**	—
Tension de grille n°oi…. … Veg,	**-13.2 V**	—
Courant d'anod@e ……n I	**100 mA**	—
Courant de grille n°2 ...c TB2	**8.5 mA**	—
Pente …… … 8	**23 mA**	—
Tension d'alimentation d'anode ……. VaN	**265 V**	—
Tension d'alimentation de grille n°02 …. VgN	**265 V**	—
Courant d'Anod@e ……...…..…..……rererierencernc. IA 2x100 | 2x1	**18 mA**	—
Courant de grille n°2 ...c 182 2x8,5 | 2x3	**2.5 mA**	—
Puissance de sortie . Ps 0	**40 W**	—
(mA) Pa=	**27 W**	—
27W V% ; —	**-2.5 V**	—
600 e x	**-5 V**	—
P -]	**2.5 V**	—

SOURCE OPERATING CONDITIONS

SOURCE PDF

1972 Philips Receiving Tubes

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

1972 PHILIPS RECEIVING TUBES

Section 1 · Pentode

CHARACTERISTICS

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	**6.3 V**	Published nominal value
Heater current	**1.05 A**	Published nominal value

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	**23000 µS**	Published or referenced operating characteristic
Transconductance	**23 mA/V**	Published quick-reference value

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Audio output power	**40 W**	ClassAB, published quick-reference value

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 1 · Pentode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Quick-reference anode current	**110 mA**	—
Output power	**40 W**	ClassAB

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Anode to grid-1 capacitance	**1.7 pF**	—
Grid-1 to heater capacitance	**0.325 pF**	—

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

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