



ELECTRONIC TUBE REFERENCE

EL36

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

High-current beam-power tube for television line-output and pulse-power applications, with low plate resistance and strong current drive for horizontal-deflection transformers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 1.2 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	5000 Ω
TRANSCONDUCTANCE	0.014 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	10 W
MAXIMUM SCREEN DISSIPATION	5 W
MAXIMUM CATHODE CURRENT	200 mA
<i>Promoted ratings and characteristics are taken from the printed target-tube entry in the approved PDF.</i>	

Beam power tube for television line-output and pulse-power service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1953 La Radiotechnique

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

1953 LA RADIOTECHNIQUE

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	1.2 A	Nominal
Maximum Plate Voltage	800 V	—
Maximum Screen Voltage	300 V	—
Maximum Plate Dissipation	12 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	14000 μ S	Typical



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Tesla

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

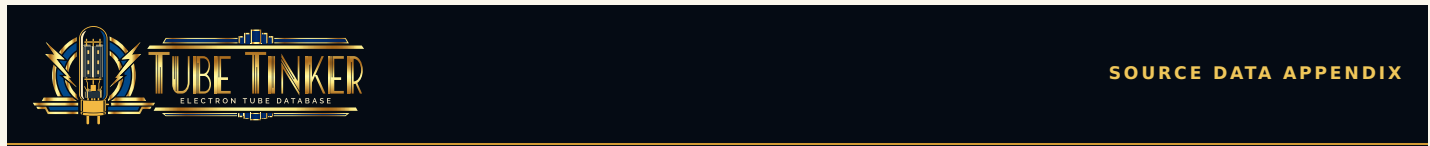
195X TESLA

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	1.2 A	Nominal
Maximum Plate Voltage	800 V	—
Maximum Screen Voltage	300 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum Plate Dissipation	12 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	14000 μ S	Typical



SOURCE OPERATING CONDITIONS

SOURCE PDF

1963 Philips Electron Tubes Handbook V1a

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

1963 PHILIPS ELECTRON TUBES HANDBOOK V1A

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published heater rating
Heater current	1.2 A	Published heater rating
Transconductance	14000 μ S	CharacteristicPoint
Plate resistance	5000 ohm	CharacteristicPoint

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	100 V	CharacteristicPoint
Plate current	100 mA	CharacteristicPoint
Screen current	7 mA	CharacteristicPoint
Push-pull plate voltage	300 V	ClassB PushPull TwoTubes
Push-pull screen voltage	150 V	ClassB PushPull TwoTubes
Push-pull grid bias	-29 V	ClassB PushPull TwoTubes
Push-pull plate current	200 mA	ClassB PushPull TwoTubes
Push-pull power output	44.5 W	ClassB PushPull TwoTubes

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	6.3 V	Nominal
HeaterCurrentNominal	1.25 A	Nominal
Maximum Plate Voltage	550 V	—
Maximum Screen Voltage	250 V	—
Maximum Plate Dissipation	12 W	—
Maximum Screen Dissipation	4 W	—
Maximum Cathode Current	200 mA	—
Maximum Peak Plate Voltage	7000 V	Pulse/line-output service

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	14000 μ S	Typical
Plate Resistance	15000 ohm	Typical

SOURCE OPERATING CONDITIONS

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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

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal value
Heater current	1.25 A	Published nominal value
Transconductance	14000 μ S	Published or referenced operating characteristic

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate dissipation	12 W	Published or referenced maximum rating
Audio output power	44.5 W	Two tubes push-pull ClassB



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

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1981 Russian Tubes Katsnelson and Larionov

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1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal/basic-parameter heater condition.
Heater current	1200 mA	Published heater current.
Plate current	100 mA	Published basic-parameter operating point.
Screen current	7.2 mA	Published basic-parameter operating point.
Transconductance	14000 μ S	Published basic-parameter value; normalized to μ S.
Plate resistance	5000 Ω	Published internal/plate resistance.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	250 V	Published limiting operating value.
Maximum screen voltage	250 V	Published limiting operating value.
Maximum cathode current	200 mA	Published limiting cathode-current value.
Maximum plate dissipation	10 W	Published limiting plate-dissipation value.
Maximum screen dissipation	5 W	Published limiting screen-dissipation value.
Pulse plate voltage	7000 V	Published in the filename-designated tube entry.



SOURCE OPERATING CONDITIONS

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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 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage Vi	6.3 V	—
Grid No.2 current Ig2 2x0.5	2x19 mA	—
Output power Wo 0	44.5 W	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage Va	300 v	ClassB;TwoTubes
Anode current I 2x18	2x100 mA	ClassB;TwoTubes
Anode voltage Va max	230 V	—
Anode voltage for class B operation Va max	300 V	ClassB
Cathode to heater voltage Vit max	100 V	ClassB