



ELECTRONIC TUBE REFERENCE

6V6GT

Power - TV Vertical Output electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Beam-power output tube designed primarily for audio amplification and also documented for triode-connected television vertical-deflection service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	RETMA 7AC	BASE PINS	8
NOMINAL HEATER	6.3 V / 450 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	50000 Ω
TRANSCONDUCTANCE	0.0041 S
AMPLIFICATION FACTOR	9.6
MAXIMUM PLATE VOLTAGE	315 V
MAXIMUM SCREEN VOLTAGE	285 V
MAXIMUM PLATE DISSIPATION	12 W
MAXIMUM SCREEN DISSIPATION	2 W
MAXIMUM CATHODE CURRENT	105 mA
<i>Promoted characteristics use the 250 V plate / 250 V screen Class A point; triode-connected values preserved as parameters.</i>	

Power output tube intended for audio-frequency output-amplifier service.



SOURCE OPERATING CONDITIONS

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1946 Amalgamated Wireless

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

1946 AMALGAMATED WIRELESS

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater or filament voltage	13 V	Published nominal rating
Grid-to-plate capacitance	0.7 pF	Direct interelectrode capacitance
Input capacitance	9.5 pF	Direct interelectrode capacitance
Output capacitance	7.5 pF	Direct interelectrode capacitance



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1948 Brimar Radio Valve Manual

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

1948 BRIMAR RADIO VALVE MANUAL

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	450 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	4.5 W	ClassA



1958 Brimar Radio Valve No 7

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

1958 BRIMAR RADIO VALVE NO 7

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater Voltage	6.3 V	—
Heater Current	450 mA	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	4.5 W	ClassA
Power Output	14 W	PushPull;ClassAB



SOURCE DATA APPENDIX

195X General Electric Essential Characteristics

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

195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	315 V	ClassA
Screen-grid voltage	225 V	ClassA
Grid voltage	-13 V	ClassA
Plate current	34 mA	ClassA
Screen-grid current	2.2 mA	ClassA
Load resistance	8500 ohm	ClassA
Power output	5.5 W	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA;PlateVoltage=250V
Screen-grid voltage	250 V	ClassA;PlateVoltage=250V
Grid voltage	-12.5 V	ClassA;PlateVoltage=250V
Plate current	45 mA	ClassA;PlateVoltage=250V
Screen-grid current	4.5 mA	ClassA;PlateVoltage=250V
Load resistance	5000 ohm	ClassA;PlateVoltage=250V
Power output	4.5 W	ClassA;PlateVoltage=250V
Plate voltage	180 V	ClassA;PlateVoltage=180V
Screen-grid voltage	180 V	ClassA;PlateVoltage=180V
Grid voltage	-8.5 V	ClassA;PlateVoltage=180V
Plate current	29 mA	ClassA;PlateVoltage=180V
Screen-grid current	3 mA	ClassA;PlateVoltage=180V
Load resistance	5500 ohm	ClassA;PlateVoltage=180V
Power output	2 W	ClassA;PlateVoltage=180V
Plate voltage	285 V	ClassAB;PushPull;TwoTubes
Screen-grid voltage	285 V	ClassAB;PushPull;TwoTubes
Grid voltage	-19 V	ClassAB;PushPull;TwoTubes
Zero-signal plate current	70 mA	ClassAB;PushPull;TwoTubes
Zero-signal screen current	4 mA	ClassAB;PushPull;TwoTubes
Plate-to-plate load resistance	8000 ohm	ClassAB;PushPull;TwoTubes
Power output	14 W	ClassAB;PushPull;TwoTubes
Plate voltage	250 V	ClassAB;PushPull;TwoTubes

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	80000 ohm	ClassA;PlateVoltage=315V
Transconductance	3750 uS	ClassA;PlateVoltage=315V
Plate resistance	50000 ohm	ClassA;PlateVoltage=250V
Transconductance	4100 uS	ClassA;PlateVoltage=250V



1961 Ferranti Technical Handbook

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

1961 FERRANTI TECHNICAL HANDBOOK

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA; OneTube
Screen Voltage	250 V	ClassA; OneTube
Plate Current	45 mA	ClassA; OneTube
Load Resistance	5000 ohm	ClassA; OneTube
Power Output	4.5 W	ClassA; OneTube



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1965 Sylvania Electronic Tubes Vol3

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

1965 SYLVANIA ELECTRONIC TUBES VOL3

Section 1 · Beam Power

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-to-plate capacitance	0.7 pF	—

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate voltage	250 V	ClassA
Plate voltage	250 V	ClassAB;PushPull;TwoTubes
Output power	10 W	ClassAB;PushPull;TwoTubes

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	3700 uS	ClassA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode amplification factor	9.8 ratio	TriodeConnection
Triode plate resistance	1960 Ohm	TriodeConnection


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1968 General Electric Co

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

1968 GENERAL ELECTRIC CO

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	250 V	ClassA
Screen Voltage	250 V	ClassA
Peak Positive Pulse Plate Voltage	1200 V	VerticalDeflection,TriodeConnection

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Triode-Connection Amplification Factor	9.8	TriodeConnection
Triode-Connection Plate Resistance	1960 ohm	TriodeConnection
Triode-Connection Transconductance	5000 uS	TriodeConnection


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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
Heater voltagecrerereccecrecnmemsrennns VĚ	6.3 V	—
Heater currentc IĚ	450 mA	—
Tension d'Anod@@ eccreeenernenmençnmennnes Vă	315 V	—
Tension de grille n°2 Ve,	285 V	—
Plate dissipation (1).. .. Pa	12 W	—
Screen-grid dissipation crrrrcreereereeneennnces PB5	2 W	—
TEnson d'ANOd@E eeusecreenrensensencacreineseses V	250 V	—
Tension de grille n°2.. VE2	250 V	—
Tension de grille n°i Veg;	-12.5 V	—
RÉsiStance internen - p	52 kΩ	—
Transconductanceh .S	41 mA/V	—
crr nerecr cec cu T	45 mA	—
Courant de grille n° 2wecrereeeeeereensennnnne 182	4.5 mA	—
Plate voltage Va 180 250	315 V	—
Tension de grille n°2 Ve2 180 250	225 V	—
Tension de grille n° 1 (2). ... Vg -8,5 12,5	-13 V	—
Tension de crête d'entrée crcc VECI 8,5 12,5	13 V	—
Plate current à signal nul Iasigo 29 45	34 mA	—
Plate current à signal max Iasig max 30 47	35 mA	—
Courant de grille n°2 à signal nul ... Ig sigo 3 4,5	2.2 mA	—
Courant de grille n°2 à signal max.... Ig, sig max 4 6,5	6 mA	—
Résistance de charge d'anode..... Ra 5,5 5	8.55 kΩ	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Puissance de sortie PS 2 4,25	5.5 W	—
Plate voltage ...c V 250	285 V	—
Tension de grille n°2 cererereresereeee VEA 250	285 V	—
Tension de grille n° 1 (1) V@ -15	-19 V	—
Tension d'entrée, de crête à crête 2Vecr 30	38 V	—
Plate current à signal nul Iasigo 70	70 mA	—
Plate current à signal max Iasig max 79	92 mA	—
Courant de grille n°2 à signal nul..... Ig Sigo 5	4 mA	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance grille n° 1/ anode Ce,/a	0.3 pF	InterelectrodeCapacitance
Capacitance grille n° 1/ cathode et grille n° 3 ... Cg,/Ke;	10 pF	InterelectrodeCapacitance
Capacitance anode/ cathode et grille n° 3 Ca/kg;	11 pF	InterelectrodeCapacitance


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2026 Genalex Rebrand

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

2026 GENALEX REBRAND

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Current	38–46 mA	Plate 250 V; screen 250 V; grid -12.5 V
Transconductance	3000–5200 μ S	Plate 250 V; screen 250 V; grid -12.5 V

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	3.4 W	Plate 250 V; screen 250 V; load 5.0 kohm; ClassA;OneTube


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2026 Mullard Rebrand

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

2026 MULLARD REBRAND

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current	460–530 mA	Published min/max range


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2026 Tungsol Rebrand

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

2026 TUNGSOL REBRAND

Section 1 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	4.5 W	ClassA;OneTube;Plate 250 V;Screen 250 V