



ELECTRONIC TUBE REFERENCE

3Q5GT

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Directly heated beam-power amplifier with series/parallel filaments, designed for Class-A audio-output service in battery-operated receivers.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AP	BASE PINS	7
NOMINAL HEATER	2.8 V / 50 mA	PARALLEL HEATER	1.4 V / 100 mA
HEATING	Direct	SERIES OPERATION	Capable
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	80000 Ω
TRANSCONDUCTANCE	0.002 S
MAXIMUM PLATE VOLTAGE	110 V
MAXIMUM SCREEN VOLTAGE	110 V
Published promoted fields populated by semantic headings; identical repeated sections compressed.	

Directly heated beam-power amplifier for Class A audio output with series/parallel filaments.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate Voltage	90 V	ParallelFilament
Plate Current	9.5 mA	ParallelFilament
Screen Voltage	90 V	ParallelFilament
Screen Current	1.3 mA	ParallelFilament
Optimum Load	8000 ohm	ParallelFilament
Power Output	0.27 W	ParallelFilament
Harmonic Distortion	6 %	ParallelFilament
Plate Current	8 mA	SeriesFilament
Screen Current	1 mA	SeriesFilament
Power Output	0.23 W	SeriesFilament
Harmonic Distortion	8.5 %	SeriesFilament

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 μ S	ParallelFilament
Plate Resistance	90000 ohm	ParallelFilament
Transconductance	2000 μ S	SeriesFilament
Plate Resistance	80000 ohm	SeriesFilament

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

CROSSREFERENCE

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Equivalent characteristics	3V4	—



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	110 V	ClassA;ParallelFilaments
Screen-grid voltage	110 V	ClassA;ParallelFilaments
Grid No.1 bias	6.6 V	ClassA;ParallelFilaments
Plate current	10 mA	ClassA;ParallelFilaments
Screen-grid current	1.4 mA	ClassA;ParallelFilaments
Plate resistance	100000 ohm	ClassA;ParallelFilaments
Transconductance	2200 uS	ClassA;ParallelFilaments
Load resistance	8000 ohm	ClassA;ParallelFilaments
Power output	0.4 W	ClassA;ParallelFilaments
Plate voltage	90 V	ClassA;ParallelFilamentsLowVoltage
Screen-grid voltage	90 V	ClassA;ParallelFilamentsLowVoltage
Grid No.1 bias	4.5 V	ClassA;ParallelFilamentsLowVoltage

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	9.5 mA	ClassA;ParallelFilamentsLowVoltage
Screen-grid current	1.3 mA	ClassA;ParallelFilamentsLowVoltage
Plate resistance	90000 ohm	ClassA;ParallelFilamentsLowVoltage
Transconductance	2200 uS	ClassA;ParallelFilamentsLowVoltage
Load resistance	8000 ohm	ClassA;ParallelFilamentsLowVoltage
Power output	0.27 W	ClassA;ParallelFilamentsLowVoltage
Plate voltage	110 V	ClassA;SeriesFilaments
Screen-grid voltage	110 V	ClassA;SeriesFilaments
Grid No.1 bias	6.6 V	ClassA;SeriesFilaments
Plate current	8.5 mA	ClassA;SeriesFilaments
Screen-grid current	1.1 mA	ClassA;SeriesFilaments
Plate resistance	110000 ohm	ClassA;SeriesFilaments
Transconductance	2000 uS	ClassA;SeriesFilaments
Load resistance	8000 ohm	ClassA;SeriesFilaments
Power output	0.33 W	ClassA;SeriesFilaments
Plate voltage	90 V	ClassA;SeriesFilamentsLowVoltage
Screen-grid voltage	90 V	ClassA;SeriesFilamentsLowVoltage
Grid No.1 bias	4.5 V	ClassA;SeriesFilamentsLowVoltage
Plate current	8 mA	ClassA;SeriesFilamentsLowVoltage
Screen-grid current	1 mA	ClassA;SeriesFilamentsLowVoltage
Plate resistance	80000 ohm	ClassA;SeriesFilamentsLowVoltage
Transconductance	2000 uS	ClassA;SeriesFilamentsLowVoltage
Load resistance	8000 ohm	ClassA;SeriesFilamentsLowVoltage
Power output	0.23 W	ClassA;SeriesFilamentsLowVoltage



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1961 Tung Sol

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

1961 TUNG SOL

Section 1 · Beam Power

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	2200 uS	Typical

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Power Output	0.33 W	Typical