



ELECTRONIC TUBE REFERENCE

117P7GT

Power - Tetrode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

RECTIFIER-TETRODE

Brimar combination tube containing a rectifier section and a power tetrode, using a 117 V series heater. It integrates rectification and output amplification in one envelope for compact mains-powered equipment.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8AV	BASE PINS	8
NOMINAL HEATER	117 V / 90 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Dissimilar

SECTION RATINGS

SECTION1 Rectifier	
PEAK INVERSE VOLTAGE	350 V
NOMINAL OUTPUT CURRENT	75 mA
PEAK FORWARD CURRENT	450 mA
FORWARD VOLTAGE DROP	16 V
MAXIMUM HEATER-CATHODE VOLTAGE	176 V
<i>Published handbook ratings and operating characteristics reviewed.</i>	

SECTION2 Tetrode	
PLATE RESISTANCE	17000 Ω
TRANSCONDUCTANCE	0.0053 S
MAXIMUM PLATE VOLTAGE	117 V
MAXIMUM SCREEN VOLTAGE	117 V
MAXIMUM PLATE DISSIPATION	6 W
MAXIMUM SCREEN DISSIPATION	1 W
<i>Published handbook ratings and operating characteristics reviewed.</i>	

The BRIMAR 117P7GT combines a rectifier section with a power tetrode section and uses a 117 V, 0.09 A heater.



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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
RMS Input	117 V	Rectifier section

1948 BRIMAR RADIO VALVE MANUAL

Section 2 · Tetrode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	105 V	—
Anode Current	43 mA	—
Screen Voltage	105 V	—
Screen Current	4 mA	—
Control Grid Voltage	-5.2 V	—
Cathode Bias Resistor	125 ohm	—
Optimum Load	4000 ohm	—
Power Output	0.85 W	—



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	117 V	Published handbook rating
Maximum screen voltage	117 V	Published handbook rating
Plate voltage	105 V	ClassA
Screen voltage	105 V	ClassA
Control-grid bias	5.2 V	ClassA
Plate current	43 mA	ClassA
Screen current	4 mA	ClassA
Load resistance	4000 ohm	ClassA
Power output	0.85 W	ClassA
DC output current	75 mA	RectifierService
Peak inverse voltage	350 V	RectifierService
RMS supply voltage per plate	117 V	RectifierService
Peak current	450 mA	RectifierService

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	17000 ohm	Published handbook characteristic
Transconductance	5300 μS	Published handbook characteristic
Heater/filament voltage	117 V	Published heater/filament rating
Heater/filament current	90 mA	Published heater/filament rating
Tube voltage drop	6 V	At 150 mA DC



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 · Rectifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AC Plate Voltage RMS	117 V	Rectifier
DC Output Current	75 mA	Rectifier
Max Imum Ac Plate Voltage (Rms)	117 V	—
Max{Imum Dc Heater To Cathode Potential	176 V	—
Max Imum Peak Inverse Voltage	350 V	—
Max Imum Steady State Peak Plate Current	450 mA	—

1961 TUNG SOL

Section 2 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Max Imum Plate Voltage	117 V	—
Max Imum Screen Voltage	117 V	—
Max Imum Plate Dissipation	6 W	—
Maximum Screen Dissipation	1 W	—
Plate Voltage	10 V	—
Screen Voltage	106 V	—
Control Grid Voltage *	-5.2 V	—
Zero Signal Plate Current	43 mA	—
Max Imum SIgnal Plate Current	43 mA	—
Zero Signal Screen Current	4 mA	—
Max Imum Signal Screen Current	5.5 mA	—
Plate Resistance Approx.	17000 ohm	—
Transconductance	5300 uS	—
Load Resistance	4000 ohm	—
Max Imum Signal Power Output	0.85 W	—
Ac Plate Voltage (Rms)	117 V	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Minimum Total Effective Plate Supply Impedance	15 ohm	—