



ELECTRONIC TUBE REFERENCE

7B8

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

HEPTODE

Receiver oscillator-converter combining local oscillation and signal mixing for superheterodyne frequency conversion. Its multi-grid structure integrates the front-end frequency-changing functions in one envelope.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8X	BASE PINS	8
NOMINAL HEATER	7 V / 320 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Heptode	
PLATE RESISTANCE	360000 Ω
TRANSCONDUCTANCE	0.00055 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	1.1 W
MAXIMUM SCREEN DISSIPATION	1.5 W
MAXIMUM GRID DISSIPATION	0.75 W
MAXIMUM CATHODE CURRENT	14 mA
<i>Published promoted fields populated by semantic heading; identical repeated physical sections compressed.</i>	

A Lock-In heptode converter designed for frequency-converter service and broadly equivalent in function to the 6A8GT.



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 · Heptode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Voltage	250 V	—
Anode Current	3.5 mA	—
Screen Voltage	100 V	G3,G5
Screen Current	2.7 mA	—
Oscillator Anode Voltage	150 V	G2
Oscillator Anode Current	4 mA	—
Control Grid Voltage	-3 V	G4
Cathode Bias Resistor	300 ohm	—
Oscillator Grid Resistor	50000 ohm	G1
Oscillator Grid Current	0.4 mA	—
Conversion Conductance	550 uS	—



SOURCE OPERATING CONDITIONS

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1950 Sylvania

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1950 SYLVANIA

Section 1 · Heptode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterVoltageNominal	7 V	Nominal

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HeaterCurrentNominal	320 mA	Nominal
Plate Voltage	250 V	Converter
Screen Voltage	100 V	Converter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion Conductance	350 uS	PlateVoltage=250V



SOURCE OPERATING CONDITIONS

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195X General Electric Essential Characteristics

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195X GENERAL ELECTRIC ESSENTIAL CHARACTERISTICS

Section 1 · Heptode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Oscillator-grid current	0.4 mA	Converter
Oscillator-grid resistor	50000 Ohm	Converter
Typical plate voltage	250 V	Converter
Typical screen voltage	100 V	Converter
Typical grid voltage	-3 V	Converter
Typical plate current	3.5 mA	Converter
Typical screen current	2.7 mA	Converter
Oscillator plate voltage	250 V	Converter
Oscillator plate series resistance	20000 Ohm	Converter
Oscillator plate current	4 mA	Converter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	360000 Ohm	Converter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion transconductance	550 μ S	Converter



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

1961 Tung Sol

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1961 TUNG SOL

Section 1 · Heptode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion Transconductance	550 μ S	Typical
Oscillator Transconductance	1150 μ S	OscillatorNotOscillating