ELECTRONIC TUBE REFERENCE

6A8G

Voltage - Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
HEPTODE

Glass-envelope pentagrid oscillator-converter for superheterodyne radio receivers. It combines local oscillation and mixing within one multi-grid tube, providing established frequency-changing performance from conventional receiver supplies.

General characteristics

BASE DESIGNATION	8A	**BASE PINS**	8
NOMINAL HEATER	6.3 V / 300 mA	**PARALLEL HEATER**	– / –
HEATING	Indirect	**SERIES OPERATION**	Not specified
CATHODE ARRANGEMENT	Separate cathodes	**SECTION CONSTRUCTION**	Similar

Section ratings

SECTION1 Heptode

PLATE RESISTANCE	360000 Ω
TRANSCONDUCTANCE	0.00055 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM SCREEN DISSIPATION	0.3 W
MAXIMUM CATHODE CURRENT	14 mA

Published maximum ratings and representative operating characteristics reviewed.

6A8G is explicitly printed with 6A8 on the same source and is a pentagrid frequency-converter designation covered by that sheet.

SOURCE OPERATING CONDITIONS

1937 Raytheon Radio Receiving Tubes

SOURCE PDF

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

1937 RAYTHEON RADIO RECEIVING TUBES

Section 1 · Heptode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate voltage	**100 V**	Converter
Screen voltage	**50 V**	Converter
Plate voltage	**250 V**	Converter
Screen voltage	**100 V**	Converter
Oscillator-grid resistor	**50000 Ω**	Converter

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Conversion transconductance	**360 µS**	Converter
Plate resistance	**300000 Ω**	Converter
Conversion transconductance	**550 µS**	Converter

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1948 Brimar Radio Valve Manual

SOURCE PDF

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

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Oscillator Anode Voltage Maximum	**200 V**	G2

CHARACTERISTICS		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum Operating Frequency	**20 MHz**	Suitable circuits

SOURCE OPERATING CONDITIONS

1950 Sylvania

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

1950 SYLVANIA

Section 1 · Heptode

CHARACTERISTIC		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Transconductance	**550 µS**	—
Conversion Transconductance	**550 µS**	—

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Maximum Plate Voltage	**300 V**	—

SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

SOURCE PDF

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 · Heptode

OTHER		
PARAMETER	**PUBLISHED VALUE**	**CONDITION / NOTE**
Plate Voltage	**250 V**	—
Plate Current	**3.5 mA**	—
Screen Voltage	**100 V**	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen Current	**2.7 mA**	—
Oscillator Anode Supply Voltage	**250 V**	—

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

Section 1 · Heptode

OTHER

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	**300 V**	Published handbook rating
Maximum screen voltage	**100 V**	Published handbook rating
Plate voltage	**250 V**	ClassA
Screen voltage	**100 V**	ClassA
Control-grid bias	**3 V**	ClassA
Plate current	**3.5 mA**	ClassA
Screen current	**2.7 mA**	ClassA

CHARACTERISTIC

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	**360000 ohm**	Published handbook characteristic
Transconductance	**550 µS**	Published handbook characteristic
Heater/filament voltage	**6.3 V**	Published heater/filament rating
Heater/filament current	**300 mA**	Published heater/filament rating

Tube Tinker
An independent reference for electronic tubes, vacuum tubes, and their source documents.

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