



ELECTRONIC TUBE REFERENCE

26D6

Voltage Radio Detector Converter electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

HEPTODE

Heptode oscillator-converter for superheterodyne receivers using low-current series heater strings. Its multi-grid structure combines local oscillation and mixing with high plate resistance and useful conversion gain.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7CHV	BASE PINS	7
NOMINAL HEATER	26 V / 70 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Heptode	
PLATE RESISTANCE	1000000 Ω
TRANSCONDUCTANCE	0.000475 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	100 V
<i>Published promoted values applied where semantically applicable; additional table values retained in section parameters.</i>	

Pentagrid converter for mixer and oscillator service in superheterodyne aircraft receivers.

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	1.5 V	ClassA
Plate current	3 mA	ClassA
Screen current	7.8 mA	ClassA
Oscillator grid current	0.5 mA	Converter Oscillator
Oscillator cathode resistor	20000 ohm	Converter Oscillator

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	1000000 ohm	Published handbook characteristic
Transconductance	475 μ S	Published handbook characteristic
Heater/filament voltage	26.5 V	Published heater/filament rating
Heater/filament current	70 mA	Published heater/filament rating

1960 RCA Industrial and Communications Types

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

1960 RCA INDUSTRIAL AND COMMUNICATIONS TYPES

Section 1 · Heptode

APPLICATION		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Application	Pentagrid mixer / oscillator	—

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion transconductance	475 μ S	—



SOURCE DATA APPENDIX

1971 RCA HB3 Binder 3 of 7

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

1971 RCA HB3 BINDER 3 OF 7

Section 1 · Heptode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Voltage	25.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Current – published value 1	0	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Current – published value 2	7	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #3 to All -Other Electrodes (RF Input) – published value 1	3	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #3 to All -Other Electrodes (RF Input) – published value 2	0	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #3 to All -Other Electrodes (RF Input) – published value 3	7.5	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate to All Other Electrodes (Mixer Output)	14	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to All Other Electrodes (Osc. Input) 5.8~ – published value 1	1	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to All Other Electrodes (Osc. Input) 5.8~ – published value 2	5.8	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to External Shield and All Other	1	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Electrodes Except Cathode & Grid No.5	2.9	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Cathode d Grid #5 – published value 1	1	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Cathode d Grid #5 – published value 2	5	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Cathode d Grid #5 – published value 3	2.8	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Electrodes Except Grid #1 – published value 1	1	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Electrodes Except Grid #1 – published value 2	15.5	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Pin 1 - Grid No.1 – published value 1	1	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Pin 1 - Grid No.1 – published value 2	5	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Pin 2 - Cathode,	2	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Pin 3 -Heater – published value 1	3	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Pin 3 -Heater – published value 2	7	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Pin 4 - Heater	4	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Voltage – published value 1	26.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Voltage – published value 2	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Voltage – published value 3	250 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Voltage – published value 1	26.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Voltage – published value 2	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Voltage – published value 3	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.3 Voltage – published value 1	-0.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.3 Voltage – published value 2	-1.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.3 Voltage – published value 3	-1.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-Resistor – published value 1	20000 ohm	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-Resistor – published value 2	20000 ohm	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-Resistor – published value 3	20000 ohm	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Resistance (Approx.) – published value 1	0.5 Mohm	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Resistance (Approx.) – published value 2	1 Mohm	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Conversion Transconductance – published value 1	270	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Conversion Transconductance – published value 2	455	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Conversion Transconductance – published value 3	475	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Current – published value 1	0.45 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Current – published value 2	2.8 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Current – published value 3	3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Current – published value 1	1.6 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Current – published value 2	8 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Current – published value 3	7.8 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.1 Current – published value 1	0.1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid-No.1 Current – published value 2	0.5 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.1 Current – published value 3	0.5 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Total Cathode Current – published value 1	2.15 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Total Cathode Current – published value 2	11.3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Total Cathode Current – published value 3	11.3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Voltage – published value 1	26.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Voltage – published value 2	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Voltage – published value 1	26.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grids-No.2 & No.4 Voltage – published value 2	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.3 Voltage – published value 1	0 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.3 Voltage – published value 2	0 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.1 Voltage – published value 1	0 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid-No.1 Voltage – published value 2	0 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Transconductance – published value 1	4500	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance – published value 2	7200	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Current – published value 1	5.5 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Plate Current – published value 2	27 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
i With grid-X o.3 Dias of -6 vc lts	-6	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-N'28Ns4 VOLTS=26.5 – published value 1	28 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-N'28Ns4 VOLTS=26.5 – published value 2	26.5 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRID-N~1 MILLIAMPERES=0.1 – published value 1	1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #3 to Plate – published value 1	3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #3 to Plate – published value 2	0.3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Grid #3 – published value 1	1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Grid #3 – published value 2	3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Grid #3 – published value 3	0.15 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Grid #1 to Plate – published value 1	1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Grid #1 to Plate – published value 2	0.03 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
PLATE VOLTAGE	300 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-No.2 d No.4 (SCREEN) VOLTAGE	100 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-No.2 d No.4 SUPPLY VOLTAGE	300 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
PLATE DISSIPATION	1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-No.2 3 No.4 DISSIPATION – published value 1	3 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
GRIDS-No.2 3 No.4 DISSIPATION – published value 2	1 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
TOTAL CATHODE CURRENT	14 mA	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Negative bias value'	50 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Positive bias value	0 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Heater negative with respect to cathode	90 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.
Heater positive with respect to cathode	90 V	Published datasheet value; multiple numbers on one source row represent separate limits or operating conditions.