



ELECTRONIC TUBE REFERENCE

1C8

Voltage Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

HEPTODE

Battery or receiving-tube frequency converter combining local-oscillator and mixer action for superheterodyne radio service. Its multi-grid structure provides frequency conversion while minimizing component count and, in battery types, filament power.

GENERAL CHARACTERISTICS

BASE DESIGNATION	8CN	BASE PINS	8
NOMINAL HEATER	1.25 V / 40 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Heptode	
PLATE RESISTANCE	400000 Ω
MAXIMUM PLATE VOLTAGE	67.5 V
MAXIMUM SCREEN VOLTAGE	45 V
<i>Promoted from the printed condensed-manual maximum/characteristic columns; operating-point values are retained in TUBE_SECTION_PARAMETER.</i>	

Directly heated pentagrid converter for low-voltage frequency-conversion service.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

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
Conversion Conductance	100 μS	Plate/screen 30 V
Oscillator Mutual Conductance	700 μS	—
Oscillator Amplification Factor	3.5	—



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
Oscillator grid current	0.07 mA	Converter
Grid resistor	100000 Ω	Converter
Plate voltage	67.5 V	Converter
Screen voltage	67.5 V	Converter
Control-grid voltage	0 V	Converter
Plate current	1 mA	Converter

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Screen current	1.5 mA	Converter
Oscillator-grid resistor	20000 Ω	Converter

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	400000 Ω	Converter
Conversion transconductance	150 μS	Converter