



ELECTRONIC TUBE REFERENCE

1LA6

Voltage - Pentode or Tetrode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

HEPTODE

Low-consumption battery heptode for oscillator-converter service in portable superheterodyne radios. Its economical filament and high plate resistance provide useful frequency conversion from modest receiver supply voltages.

GENERAL CHARACTERISTICS

BASE DESIGNATION	7AK	BASE PINS	8
NOMINAL HEATER	1.4 V / 50 mA	PARALLEL HEATER	– / –
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Heptode	
PLATE RESISTANCE	700000 Ω
TRANSCONDUCTANCE	0.00025 S
MAXIMUM PLATE VOLTAGE	90 V
MAXIMUM SCREEN VOLTAGE	65 V
MAXIMUM CATHODE CURRENT	3 mA
<i>Pentagrid converter; oscillator characteristics preserved as parameters.</i>	

1LA6 is listed as a pentagrid converter in the supplied receiving-tube handbook. It uses a 1.4 V, 0.05 A directly heated filament. The handbook publishes maximum ratings and representative operating characteristics for its intended service.



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	110 V	Published handbook rating
Maximum screen voltage	65 V	Published handbook rating
Plate voltage	90 V	ClassA
Screen voltage	45 V	ClassA
Control-grid voltage	0 V	ClassA
Plate current	0.55 mA	ClassA
Screen current	0.6 mA	ClassA

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate resistance	750000 ohm	Published handbook characteristic
Transconductance	250 μ S	Published handbook characteristic
Filament voltage	1.4 V	DirectlyHeated DC filament
Filament current	50 mA	DirectlyHeated DC filament



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

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Conversion Transconductance	250 uS	Converter
Oscillator Transconductance	550 uS	Oscillator;NotOscillating
Oscillator Amplification Factor	40	Oscillator;NotOscillating

TUBE TINKER

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