

ELECTRONIC TUBE REFERENCE

6A4P

Heptode electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
HEPTODE

Russian high-transconductance converting heptode intended for pulse-operated stationary equipment, combining signal conversion with unusually high transconductance and substantial plate ratings.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	7
NOMINAL HEATER	6.3 V / 485 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Heptode	
TRANSCONDUCTANCE	0.016 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	20 mA
Representative section row from the complete filename-matched Russian datasheet content only; neighboring-tube fragments excluded.	

The 6A4P is an indirectly heated high-transconductance converting heptode for pulse-operated stationary equipment.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

195X Russian

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

195X RUSSIAN

Section 1 · Heptode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode voltage	200 V	Published operating point
Grid 2 and grid 4 voltage	100 V	Published operating point
Grid 1 voltage	-10 V	Published operating point
Grid 1 pulse voltage	10 V	Pulse
Anode pulse current	34 mA	Published value
Grid 2 pulse current	26 mA	Published value
Grid 4 pulse current	32 mA	Published value
Grid 1 transconductance	16 mA/V	At grid 1 -11 V
Grid 3 transconductance	5.5 mA/V	At grid 3 -3 V
Grid 1 inverse current	0.5 uA	Published condition



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Heptode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage nominal	6.3 V	Published heater operating voltage

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater current nominal	485 mA	Nominal or midpoint of published heater-current tolerance
Heater current minimum	440 mA	Heater 6.3 V
Heater current maximum	530 mA	Heater 6.3 V
Pulse plate current	34 mA	Published pulse operating point
Grid 1 transconductance	16 mA/V	Grid 1 at -11 V
Grid 3 transconductance	5.5 mA/V	Grid 3 at -3 V

CAPACITANCE		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Input capacitance grid 1	10.5 pF	Published nominal
Input capacitance grid 3	11.5 pF	Published nominal
Output capacitance	2.8 pF	Per plate
Plate-to-grid 1 capacitance	0.08 pF	Maximum
Plate-to-grid 3 capacitance	0.35 pF	Published
Plate-to-plate capacitance	0.26 pF	Maximum

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage minimum	5.7 V	Operating limit
Heater voltage maximum	7 V	Operating limit

TUBE TINKER

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