



ELECTRONIC TUBE REFERENCE

6N21B

Voltage - Triode (under 100V) electronic tube

CONSOLIDATED TECHNICAL DATA
2 SECTIONS
CONSTRUCTION
TRIODE-TRIODE

Russian double triode designed for low-frequency voltage amplification, providing two triode sections for compact small-signal amplifier circuits.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 395 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode	
TRANSCONDUCTANCE	0.038 S
AMPLIFICATION FACTOR	82
MAXIMUM PLATE VOLTAGE	57 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	10 mA
Bilingual Russian/English datasheet; English text used as primary extraction source.	

SECTION2 Triode	
TRANSCONDUCTANCE	0.038 S
AMPLIFICATION FACTOR	82
MAXIMUM PLATE VOLTAGE	57 V
MAXIMUM PLATE DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	10 mA
<i>Second physical triode restored.</i>	

The 6H21B double triode is designed for ampli- JICHMS HalpsAXKeHHs HH3KOH YaCTOTHI fication of low-frequency voltage.



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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal heater condition.
Heater current	395 mA	Published heater current.
Transconductance	3500 μ S	Published characteristic; normalized to μ S.
Amplification factor	82	Published characteristic.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	250 V	Published limiting operating value.
Maximum plate dissipation	1 W	Published limiting operating value.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1970 Russian Tubes Mashpriborintorg

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

1970 RUSSIAN TUBES MASHPRIBORINTORG

Section 1 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
U	63 V	Published datasheet line: U, 63V) 35x13mA
I	395+35 mA	Published datasheet line: I, 395+35 mA S1) 38+12mA/V
U	200 V	Published datasheet line: U, 200V ply 82X

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
R	330 Q	Published datasheet line: R} 330Q
pF Cin	< 13 pF	Published datasheet line: pF Cin < 13 pF
Cnx	1,65+0,35 pF	Published datasheet line: Cnx 1,65+0,35 pF Cala2 < 0,045 pF
Uy	7 V	Published datasheet line: Uy 7V 57V I 10 mA
U	250 V	Published datasheet line: U, 250 V U 200 V
U	350 V	Published datasheet line: U, 350V Ryr?) 2MQ
UgT	-50 V	Published datasheet line: UgT -50V Thationa ggge ¢
P	1 W	Published datasheet line: P, 1 W

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Uy	7 V	Published datasheet line: Uy 7V 57V I 10 mA
U	250 V	Published datasheet line: U, 250 V U 200 V
U	350 V	Published datasheet line: U, 350V Ryr?) 2MQ
UgT	-50 V	Published datasheet line: UgT -50V Thationa ggge ¢
P	1 W	Published datasheet line: P, 1 W
PublishedValue	7 g	Published datasheet line:] 7/[JS_ g 5 J_fifi »
A b_ q / // . F E- Wl	74 A	Published datasheet line: & ' A b_% q,*/— // . F~ E-?Wl" 74
A A	5 A	Published datasheet line: A A ' 5 -


SOURCE DATA APPENDIX

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 · Triode

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage	6.3 V	Published nominal heater condition.
Heater current	395 mA	Published heater current.
Plate current	3.5 mA	Published basic-parameter operating point.
Transconductance	3800 μS	Published basic-parameter value; normalized to μS .
Amplification factor	82	Published basic-parameter value.
Service life	2000 h	Published service-life figure.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Maximum plate voltage	252 V	Published limiting operating value.
Maximum cathode current	10 mA	Published limiting cathode-current value.
Maximum plate dissipation	1 W	Published per-triode plate dissipation.

TUBE TINKER

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and their source documents.

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