

ELECTRONIC TUBE REFERENCE

6Z51P

Voltage - Pentode High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Russian sharp-cutoff high-frequency pentode designed specifically for intermediate-frequency wideband amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B9A	BASE PINS	9
NOMINAL HEATER	6.3 V / –	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.0155 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	2.5 W
MAXIMUM SCREEN DISSIPATION	1 W
MAXIMUM CATHODE CURRENT	25 mA
English-primary bilingual extraction; published ratings promoted where clear.	

PENTODE 6I PRKTEPUCTHKON IIpe[HAa3HAYeH MHJIA YCHJIEHHS Hampsxe- pentode has been designed to amplify intermediate-

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 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
PENTODE	6	PENTODE 6I
BeicouxuacToTHeli nenron	6	BeicouxuacToTHeli nenron 6)K51IT ¢ kopoTxoH xa- The 6XSIIT high-frequency short-characteristic
Published electrical value	4	1 — xaron; 2 — cerca nepsas; 3 — KaTond; 4 — ogorpeBsaTesb;
Published electrical value	8	5 — noporpesaTtens; 6 — 3KkpaH; 7 — aHO#; 8§ — ceTKa Bropas:
Published electrical value	9	9 — ceTKa TpeTha
Published electrical value	61.5	61,5max
I — cathode	5	I — cathode; 2 — grid 1; 3 — cathode; 4 — heater; 5 — heater;
Published electrical value	3	6 — screen; 7 — anode; 8§ — grid 2; 9 — grid 3
BubpanuonHsle Harpy	60 Hz	BubpanuonHsle Harpy3k# B AHAana3oHe 4acToT OT 1 Vibration: at frequencies from 1 to 60 Hz with
oo	-45	oo 15 mc. Temnepatypa okpyxalowweit cpeast oT —45
npu Temueparype	25	npu Temueparype 25 °C. up to 98% at 25 °C.
Published electrical value	6.3	1 < B - N 6,3 heater i 6.3
= < (	200	= < (0- P 200 ANOAE .. e 200
CETKH BTOPOMoioitiitinniiieiiineeiinnnnn	200 A	CETKH BTOPOMoioitiitinniiieiiineeiinnnnn. 200 A 2 e 200
in e Q grid	0	in e Q grid 3 s 0
Published electrical value	25 mA	-5+ 5 ¢ St 300+25 Current, mA:
Published electrical value	25	- 0 4- 8,5£2,7 BEAtEr ..ttt e 300+25

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
e iiiinnaenenns	2.7	e iiiinnaenenns 3,5+L5 ANOAE i 8.5+2.7
AHOJA B HaYaJle XaPaKTEPUCTHKHU (T	15	AHOJA B HaYaJle XaPaKTEPUCTHKHU (T1PH HANPAKEHHH grid 2 e 3.5+15
cetk@ mepBod –	-8.5	cetk@ mepBod —8,5B)
Published electrical value	3	 =10-10-3 anode, cutoff, at grid 1 voltage —8.5V =10Xx10-3
Conp0THBJICHHE B LEIH KaTOAA J/IA aBTOMATHYECKOTO Resistance in cathode circuit for automatic bias, Ohm	200 Ohm	Conp0THBJICHHE B LEIH KaTOAA J/IA aBTOMATHYECKOTO Resistance in cathode circuit for automatic bias, Ohm 200
Published electrical value	4 V	 200 Transconductance, mA/V, 15.5+4
KpyTtn	0.5 mA	KpyTtn3Ha xapaktepactuxu, MA/B 15,5+4 Inverse grid 1 current, gA oo =0.5
00GpaTHbLid TOK CETKM EPBOM, MKA =	0.5	00GpaTHbLid TOK CETKM EPBOM, MKA =0,5
BX00HAM ... oiitinteeetiiianrernnnnannens	23	BX00HAM ... oiitinteeetiiianrernnnnannens 11,5E2,3 PUL Lttt 11.5+£23
BBIXOHHAA ...ttt tntneieeiinennnnnns	3.3	BBIXOHHAA ...ttt tntneieeiinennnnnns 3,3i8:\$ OULPUL .o ietteiie
ettt iiaee s	7	ettt iiaee s 33 07
TPOXOMHAA .ottt etie e tinetienseenneennns	44	TPOXOMHAA .ottt etie e tinetienseenneennns 0,0016+0:0044 s 0.0016+0-0044
OJleKTpHYECKHE NapaMeTprl B TeyeHue	9	OJleKTpHYECKHE NapaMeTprl B TeyeHue 3000 9 sxcrit-
aTauuu: Electrical parameters over	3000	aTauuu: Electrical parameters over 3000 operating hours:
KPYTH	9.2 V	KPYTH3HA XapaKTepHCTHKH, MA/B =92 transconductance, mA/Vot =9.2
Published electrical value	2	0oOpaTHEI# TOK CETKH NepBOd, MKA =2 inverse grid 1 current, LAot =2
TIpeneabkble	3	TIpeneabkble 3HA4CHIA JONYCTHMBIX Limit Values of Operating
e R	5.7	e R 7 57 heateroovviviinenninn.. 7 5.7
BHODA ..ovmvevisenieiins	250	BHODA ..ovmvevisenieiins 250 ANOdE ... 250

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
anoza npu	550	anoza npu 3aneproï namne ... 550 anode in cut-off valve 550
CETKH BTOPOH	250	CETKH BTOPOH 250 BOAZ e 250
CETKH BTOPOH NpH	550	CETKH BTOPOH NpH 3an€pToH fam- grid 2 in cut-off valve 550
npit NONOXKHTCIBHOM NOTEH- tial	100	npit NONOXKHTCIBHOM NOTEH- tial ... 100
uuane nogorpesaTens	100	uuane nogorpesaTens 100 with heater at negative poten-
npH OTPHUATE/ILHOM IOTEH- tial	150	npH OTPHUATE/ILHOM IOTEH- tial ... 150
Published electrical value	150	1nHase NOAOrpesaTens 150
TOK KATOMA, MA v v oo	25 V	TOK KATOMA, MA v v oo 25 Cathode current, mA 25
pacedpaeMas aH000M	2.5	pacedpaeMas aH000M 2,5 ,
paccensaemas ceTkoH BTOPOH	5	paccensaemas ceTkoH BTOPOH 1 at anf)di 5
CoNpOTHBACHHE B LENHM CETKH Mep- atgrid	1	CoNpOTHBACHHE B LENHM CETKH Mep- atgrid2 ...l 1
BOH. KOMccoiuinnnn	1000 kOhm	BOH. KOMccoiuinnnn 1000 Resistance in grid 1 circuit, kOhm ... 1000
= Ya=llg	200	= Ya=llg2=200) i
—J;W? ~., T	4 V	—J;W? ~., T4 Yp=gz 230 T200v V]l 4ov] MERRS Jif l{ T
SIS	25	SIS 1 25
Published electrical value	17	{17] I i JaVA Py
Xa aH0IA B	3	Xa aH0IA B 3aBUCHMOCTH OT Hamps- Ka CETKH BTOPO#l B 3aBUCHMOCTH OT TH3HBI B 3aBHCHMOCTH OT HanpsXeHUs
Averaged characteristics of anode Averaged characteristics of grid	2	Averaged characteristics of anode Averaged characteristics of grid 2 Averaged characteristics of transcon-
current versus grid	1	current versus grid 1 voltage current versus grid 1 voltage ductance versus grid 1 voltage
Published electrical value	5	\ -1'5v\ = VYcpeaHeHHbIE XapaKTEPUCTHKH:
Published electrical value	2	50 2y P 2 1] — ToK aHOHa; 2 — TOK CETKH BTOPO#H
Published electrical value	230 V	40 DAV LT IL v Un=6,3V, Ug=230V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	2	30 i S ~ R 1 — anode current; 2 — grid 2 current
$\phi' < L = a \sin L$	230 V	, ; $\phi' < L = a \sin L$ 25V $U_r=6.3$ V, $U_g, =230$ V
L AREENEEERN [T	1	L AREENEEERN [T 1
f — —	1	f — — 501 . ; L-+—1 4. _JT:_ bl Uar 05!1
— Upy=	5	— Upy= 5V
T _fl“\“/‘ /	1	T _fl“\“/‘ /7 s ‘ , -IVl \} ‘.€~ P ; i IIV 1
ENAATAREY a	1	ENAATAREY a0 S AR 40t Jfl\ N 1
IMECAINE > REN=	157	IMECAINE > REN= 157
DYV S ' - / (	12	DYV S ' - / (7 B = 12V
S s	250	S s 7 50 " ign a0 200 250 UV
Published electrical value	250	J0 100 150 200 250 UgV
— ToKk aHoma	2	— ToKk aHoma: 2 — TOK CEeTKH BTOPO# ! — Tok aHoma; 2 — TOK CETKHA BTOPOH
I — anode current	2	I — anode current; 2 — grid 2 current ! — anode current: 2 — grid 2 current
Un=	170 V	Un=63V, Ugp=200V Un=6.3 V, Upa=170 V

TUBE TINKER

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