

ELECTRONIC TUBE REFERENCE

6Z9P

Voltage Pentode - High Frequency (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Sharp-cutoff Russian high-frequency pentode designed for professional fixed-gain wideband amplifier service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 300 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	150000 Ω
TRANSCONDUCTANCE	0.0175 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	160 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM CATHODE CURRENT	35 mA
English-primary bilingual extraction; published ratings promoted where clear.	

PENTODE bl ctukod 67K9I1 nmpeanasHadeH Ang paboTel B IIHPOKO- pentode has been designed for use in wide-band amplifiers

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
BBICOKOYAaCTOTHBIA MEHTOX ¢ KOPOTKOH XapakTepu- The	6	BBICOKOYAaCTOTHBIA MEHTOX ¢ KOPOTKOH XapakTepu- The 6XK9I1 high-frequency short-characteristic
ctukod	67	ctukod 67K9I1 nmpeanasHadeH Ang paboTel B IIHPOKO- pentode has been designed for use in wide-band amplifiers
Published electrical value	4	1 — xaton; 2 — ceTka nepBas; 3 — KaTol; 4 — NOROrPeBaTENS;
Published electrical value	8	5 — noppesaTenb; 6 — HE NOAKIIIOUEH; / — aHON; 8 — ceTKa
Published electrical value	48	48 max
Published electrical value	4	4Imax
Published electrical value	9	+2 TpeTb, 3KpaH; 9 — ceTka BTOPas
Published electrical value	5	1 — cathode; 2 — grid 1; 3 — cathode; 4 — heater; 5 — heater;
\—	2	\— 6 — not connected; 7 — anode; 8 — grid 3, screen; 9 — grid 2
Bu	60 Hz	Bu6paunoHHsble HaIPy3KH B OMana3oHe 9acToT OT 1 Vibration: at frequencies from 1 to 60 Hz with
Harpys	40	Harpys3ku ¢ yckopenueM o 40 g. TemnenaTypa okpyxaro-
Published electrical value	6.3	b2 2:1 - 01 - Y 6,3 heater i e 6.3
AHOMA v coivein e enneeseennnnnseenneesnnns	150 V	AHOMA v coivein e enneeseennnnnseenneesnnns 150 anode ... i 150
CETKA BTOPOH .. covieeiniitreiinennennneennns	150	CETKA BTOPOH .. covieeiniitreiinennennneennns 150 grid 2 L. i 150

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
CeTKHM TPETBEH ttt iinirinanannnn	0	CeTKHM TPETBEH ttt iinirinanannnn 0 grid 3 L. 0
OTCEYKH IEKTPOHOTO TOKA CETKH NEPBOH (pH grid	1	OTCEYKH IEKTPOHOTO TOKA CETKH NEPBOH (pH grid 1 electron current cutoff, at grid 1 current
anoga	-8.5 mA	anoga 0,01 MA),Be6omee —8,5
HAKAMA .« oitittneteneeiiie e aieanennnnns	300130	HAKAMA .« oitittneteneeiiie e aieanennnnns 300430 heater ... e e 300130
e nnnnnnnnnnnnn =	5	e nnnnnnnnnnnnn =5 Brd 2 Lo =5
ConpoTHBiIeHHE B LleH xaToaa, OM	80	ConpoTHBiIeHHE B LleH xaToaa, OM 80
Resistance in cathode circuit, Ohm	80 Ohm	Resistance in cathode circuit, Ohm 80
BHyTpeHHee conporuBnenu, MOM	0.15	BHyTpeHHee conporuBnenu, MOM 0,15
Internal resistance, MOhm	0.15 MOhm	Internal resistance, MOhm 0.15
BxoaHoe compoTHeiiieHHe Ha uactote	60	BxoaHoe compoTHeiiieHHe Ha uactote 60 MI'u, kOM §
Input resistance at	5 kOhm	Input resistance at 60 MHz, kOhm 5
OKBHBaJIEHTHOE COMPOTHBIICHAIE IYMOB, KOM	0.35 kOhm	OKBHBaJIEHTHOE COMPOTHBIICHAIE IYMOB, KOM 0,35 Equivalent noise resistance, kOhm 0.35
KpyTH	4.5 V	KpyTH3Ha xapakTepycTakd, MA/B 17,5445 Transconductance, mA/V coiiiiinnn. 17.5+4.5
Published electrical value	0.3 V	O6paTHEI# TOK ceTKH NepBoii (IPH HANPSKEHHH CETKH Inverse grid 1 current, at grid 1 voltage ~2 V, uA =0.3
nepBolt —	3	nepBolt —2 B), MKA =03
BXODHAN .« .o vvvtenernnnnnaneaneannennennananans	1.1	BXODHAN .« .o vvvtenernnnnnaneaneannennennananans 8,5t1,1 10 o111 8.5%1.1
BBIXOIMHAN ... vvvnenerennenesnrenennersnnns	0.6	BBIXOIMHAN ... vvvnenerennenesnrenennersnnns 3,0+0,6 OULDUL .ot tiiee et iinerraeceannnnnenonnn 3.01£0.6

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	0.03 V	170700 0e¥11: t: V- S =0,03 transfer ... i e =0.03
KaTOHO —HOMOIPEBATETD . . . vvvveerenennnnneennns =	7	KaTOHO —HOMOIPEBATETD . . . vvvveerenennnnneennns =7 cathode-to-heater iieiinnnn =7
OnexTpHyeckHe napameTpst B TedeHue	4	OnexTpHyeckHe napameTpst B TedeHue 1500 4 skcmy-
Electrical parameters over	1500	Electrical parameters over 1500 operating hours:
Published electrical value	1 A	0oOpaTHEI# TOK CETKH MepBOM, MKA =1,5 inverse grid 1 current, A
KPYTH	11 V	KPYTH3HA XapaKTepHCTHAKH, MA/B =11 transconductance, mA/V l =11
HAKATIA .. iivennreinnnnnnnnns	5.7	HAKATIA .. iivennreinnnnnnnnns 7 5,7 heater vviiei e 7 5.7
QHOMA o vevevnernnnncnroaanns	250	QHOMA o vevevnernnnncnroaanns 250 anode o 250
CETKH BTOPO#H	160	CETKH BTOPO#H 160 grid2 ... 160
LMane nogorpepares	100	LMane nogorpepares 100 tial ... 100
Mane NogorpeBaTens	150	Mane NogorpeBaTens 150 tial ... 150
CeTKH NEPBOK	-100	CeTKH NEPBOK - 100 gridl i, -100
Published electrical value	3	4HOJA IpH 3amepToi namne (Ip# anode in cut-off valve, at anode
TOKe aHoda =SMKA)	285	TOKe aHoda =SMKA) 285 current at most S wA 285
CETKH BTOpPO#l NpH	2	CETKH BTOpPO#l NpH 3anepToit 1aM- grid 2 in cut-off valve, at anode
e (np Toke aHOOA =S	285 A	e (np Toke aHOOA =S5 MKA) ... 285 current at most 5 A 285
Tok xaToma, MA	35 mA	Tok xaToma, MA 35 Cathode current, mA 35
pacceuBaemasa ceTKoit Bropo#t	0.75	pacceuBaemasa ceTKoit Bropo#t 0,75) 0.75
paccenBaeMas aHOIOM	3	paccenBaeMas aHOIOM 3 at grxc;l 3.
BoM, MOM: Resistance in grid	1 MOhm	BoM, MOM: Resistance in grid 1, MOhm:

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
MpA aBTOMATHYECKOM CMeELUEHHH at automatic bias	1	MpA aBTOMATHYECKOM CMeELUEHHH at automatic bias 1
np# QukcupoBaHHOM cmemennd	0.5	np# QukcupoBaHHOM cmemennd 0,5 at fixed bias 0.5
HarpeToii yvactu), °C	150	HarpeToii yvactu), °C 150 tion), °C ... e 150
lgg,mAl [I\	3	lgg,mAl [I\ 3 T YcpeHeHHbE XaPAKTEPHCTHKH:
saya L -+ T	2	saya L -+ T 1 — aHonOHBIE; 2 — CETOYHO-aHOMHBIE (IO CeTKe BTOPOi);
Published electrical value	3	4018 T. 3 — Hanbonpinas OOMyCTHMAA MOUTHOCOTD, PaccenBaemas
A TR+ L L]	5 A	A TR+ L L] 05 aHOM
anls /, '»«'	0	anls /, '»«'1 P < jy Un=6,3V, Ugp=150V, Ug;=0V
Published electrical value	200	200k - = Averaged characteristics:
=t b il o e i	0	=t b il o e i 777 Un=63YV, Ugp;=150V, Ugz=0V
vARvi	20	vARvi 020 V61
ER N /	1	ER N /1 'SNAN sl
FAR/A ' ! \	5 A	FAR/A ' ! \5"/_
AN ARA A	0	AN ARA A2k e UpV =5 -4 3 -2 -1 0
AT IATA") [	7	AT IATA") [7
VgV	-5	VgV -30-25 -20 5 -0 -5 @ YcpenHeHHbIE XapaKTePHCTHKY:
Published electrical value	2	1 — aHOHO-CETO9HafA; 2 — BXOJHOE COMPOTHBICHHE
YcpeaHeHHBIE XapaKTePHCTHKH: B	3	YcpeaHeHHBIE XapaKTePHCTHKH: B 3aBECHAMOCOT OT HaNpCKEHHA CETKH OEPBOH
— aHOHO-CETOYHBIE	0 V	— aHOHO-CETOYHBIE; 2 — CETOYHbIE (10 CETKE BTOPOH); Un=6,3 V, Us=180 V, Ug =150 V, Ug;=0V,
Published electrical value	210 MHz	3 — XpyTu3Ha f=210 MHz
Averaged characteristics: I — anode-grid	2	Averaged characteristics: I — anode-grid; 2 — input resistance versus grid I

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	3	1 — anode-grid; 2 — grid (for grid 2); 3 — trans- voltage
conductance Un=	0 uA	conductance Un=63V, Ua=180V, Upz=150V, Ugz=0V,
Un=	210 uA	Un=63V, Ua=150V, Ug;=0V f=210 MHz

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TOKe ceTKu nepsoi	-1.1	TOKe ceTKu nepsoi 0,5 MxA), He Bonee -1,1 0.5 WA, Max. ... -1.1
Published electrical value	-8.5 mA	3amMparomiee HanpsKeHAe CETKH nepBoi (npu Toke grid 1 cutoff, at anode current 0.01 mA, max. —8.5
P SL 'i --- 'FS%	3	P SL 'i ---- 'FS% 1 — anode; 2 — grid anode (for grid 2); 3 — maximum
Published electrical value	2	1l u 2 permissible anode dissipation