

ELECTRONIC TUBE REFERENCE

6Z2P

Voltage Pentode - Sharp Cutoff (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
PENTODE

Russian sharp-cutoff high-frequency pentode designed specifically for fixed-gain RF voltage amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B7G	BASE PINS	7
NOMINAL HEATER	6.3 V / 170 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	160000 Ω
TRANSCONDUCTANCE	0.00415 S
MAXIMUM PLATE VOLTAGE	200 V
MAXIMUM SCREEN VOLTAGE	150 V
MAXIMUM SCREEN DISSIPATION	0.65 W
MAXIMUM CATHODE CURRENT	20 mA
English-primary bilingual extraction; published ratings promoted where clear.	

PENTODE ctukoit 6)K2IT npeanasHau eH 1A YCHIEHAS HaNMpsAXEHHA pentode has been designed for h.f. voltage amplification,

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
BbicOK0YaCT0THBIH NEHTOA ¢ KOPOTKOH XapaKTepH- The	6	BbicOK0YaCT0THBIH NEHTOA ¢ KOPOTKOH XapaKTepH- The 6X2I1 high-frequency short-characteristic
ctukoit	1	ctukoit 6)K2IT npeanasHaueH 1A YCHIEHAS HaNMpsAXEHHA pentode has been designed for h.f. voltage amplification,
BBICOKOH	4	BBICOKOH 4aCTOTBHI.
CxeMa COeNHHEHHAA	3	CxeMa COeNHHEHHAA 3MEKTPOOOB ¢ BBIBOJAMH:
Published electrical value	4	1 — ceTxa nepBasi; 2 — KaTOA, 2KpaH; 3 — moaorpesatens, 4 —
Published electrical value	41	41max
oforpeparesb; J — aHOA	7	oforpeparesb; J — aHOA; 6 — CeTKa BTOpas; 7 — cerka Tpe-
Published electrical value	48	48 max
I — grid	4	I — grid 1; 2 — cathode and screen; 3 — heater; 4 — heater;
Published electrical value	3	5 — anode; 6 — grid 2; 7 — grid 3
BubpauuoHHBle HArpy	200 Hz	BubpauuoHHBle HArpy3KH B AMama3oHe 4acToT oT 1 Vibration: at frequencies from 1 to 200 Hz with
HArpy	15	HArpy3ku ¢ yckopenueM 1o 15 g. Temnepatypa okpyxaro-
Published electrical value	1	D.1eKTpHYecKHe NapaMeTphl Electrical Parameters
Published electrical value	6.3 V	30 v: V1 - SR 6,3 heater ..o e 6.3

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
AHOMA .o v vvveereinneeenvannensoonoonaronnaaeenns	120 V	AHOMA .o v vvveereinneeenvannensoonoonaronnaaeenns 120 - 4T T (- AP 120
CETKH BTOPOH .. ivinieneennaicnnnaaennnns	120	CETKH BTOPOH .. ivinieneennaicnnnaaennnns 120 = o T« B2P 120
CETKH TPETBEM .. .ovtiieeeeernninennanarennnanann	0	CETKH TPETBEM .. .ovtiieeeeernninennanarennnanann 0 grid 3 e 0
OTCEYKH DNEKTPOHHOTO TOKAa CETKH TiepBo#t (rpu grid	1	OTCEYKH DNEKTPOHHOTO TOKAa CETKH TiepBo#t (rpu grid 1 electron current cutoff, at grid 1 current
HAKAMIA .. ivineerrennenannaanrouasaneoanns	170	HAKAMIA .. ivineerrennenannaanrouasaneoanns 170i212 heater t
CETKH BTOPO# e =<	55	CETKH BTOPO# e =<5,5 -3s Ut =55
ConpoTuBiende uenu katoda, OM	200 Ohm	ConpoTuBiende uenu katoda, OM 200 Resistance in cathode circuit, Ohm 200
OKBHBAJIEHTHOE COMTPOTHRNIEHHE IIYMOB, KOM	4 kOhm	OKBHBAJIEHTHOE COMTPOTHRNIEHHE IIYMOB, KOM 4 Equivalent noise resistance, kOhm 4
BHyTpeHHee conpoTmBiaeHue, MOM	0.16 MOhm	BHyTpeHHee conpoTmBiaeHue, MOM 0,16 Internal resistance, MOhm c.unntn 0.16
TIO CETKE MEPBOM vvieiecnrarnecnonanss	0.95	TIO CETKE MEPBOM vvieiecnrarnecnonanss 4,151+0,95
with regard to grid	0.95	with regard to grid 1 c.coimilt. 4.15+0.95
Published electrical value	10	10 CETKE TpeThel (NpH HANPSXKEHHH CETKH Tpe-
with regard to grid	5	with regard to grid 3, at grid 3 voltage ~3V =05
THEH =	0.5	THEH =3 B) ... =0,5
Conversion transconductance, mA/V	0.8 V	Conversion transconductance, mA/V 0.8
KpyTtnsHa npeoGpa	0.8 mA	KpyTtnsHa npeoGpa3osauns, MA/B 0,8

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
BX00HAM .o oo iinsn e ieeenaancnssenenannan	4.7	BX00HAM .o oo iinsn e ieeenaancnssenenannan 3,5...4,7 IPUL L. i i i t e 3.5—4.7
BBIXOKHAA .. ovevnnnnrennnneccasonnonneneesas	3	BBIXOKHAA .. ovevnnnnrennnneccasonnonneneesas 2.3 OULPUL ..ttt ttiieennnenescanansanoenannnaas 2— 3
TIPOXOMHAN .o vvvveenenansonrnnnoesnansonas =	0.035	TIPOXOMHAN .o vvvveenenansonrnnnoesnansonas =0,035 E T ϕT3 - Gt =0.035
CETKa MepBast – CETKA BTOPAA cvvveerenun. =	1.9	CETKa MepBast — CETKA BTOPAA cvvveerenun. =19 grid-1-to-grid 2 ottt =1.9
KATOX –TIOAOTPEBATEMD o v v v v v eenennannrenns =	4.6 V	KATOX –TIOAOTPEBATEMD o v v v v v eenennannrenns =4,6 cathode-to- heater ciiinint, =<4.6
DneKTpHYeCKHe napaMeTpsl B TeyeHne	5000	DneKTpHYeCKHe napaMeTpsl B TeyeHne 5000 4 3KkcIuty- Electrical parameters over 5000 operating hours:
inverse grid	1 V	inverse grid 1 current, at grid 1 voltage -2 V,uA =1
cerkmnepBoff –	2.5 V	cerkmnepBoff — 2 B), MKA t =1 transconductance with regard to grid 1, mA/V ... =2.5
KPYTH	25 mA	KPYTH3HA XapaXTEPHCTHKHE IO CeTKe nepBod, MA/B =25
Ilpene/bHple	3	Ilpene/bHple 3HAYEHHS JOMYCTHMBIX Limit Values of Operating
HAKRTIA cvonnnnnnnnnnn	5.7	HAKRTIA cvonnnnnnnnnnn. 7 57 heater civiiiiiiann, 7 5.7
R R PRRRREE	200	R R PRRRREE: 200 ANode ...t 200
CETKH BTOPOH	150	CETKH BTOPOH 150 grid2 ..., 150
[Ease MOJOTPEBATENS	120	[Ease MOJOTPEBATENS 120 tal ... 120
LKane DOJOrpeBaTens	120	LKane DOJOrpeBaTens 120 tial ... 120
Tox xkatoga, MA	20 mA	Tox xkatoga, MA 20
MoOWHOCTb, pacceMBaeMas CeTKoi Cathode current, mA PRI	20 mA	MoOWHOCTb, pacceMBaeMas CeTKoi Cathode current, mA PRI 20

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
BTopoit, BT	0.65 W	BTopoit, BT 0,65 Power dissipation at grid 2, W 0.65
BOH,MOM	1 MOhm	BOH,MOM 1 Resistance in grid 1 circuit, MOhm 1
o, ";'	14	o, ";' -1 long byor 14
_ IRE —!	1 A	_ IRE —! 20 B A Vi A A 1 1
\/	15	V 15 ALx FT T2
TS	4	TS 1 IRy AN 4
Published electrical value	1	1% 2 P Pand 5 1 s4
LY]	150	LY] 0 77 100 150 Upv
Published electrical value	2	1 — aHomHO<ceTO4HaA; 2 — ceTo4Had (MO ceTKe BTOPOH) BKITIOYEHHE)
Un=	63	Un=6,3V, Us=120V, Up; =120V, Ugy=-2V Un=63V
Published electrical value	3 V	1 — anode-grid; 2 — grid (for grid 2) '6':3"6)3 v
Un=	-2 V	Un=63V, Us=120 V, Uz =120 V, Ugy=-2V .
ugt =	1	ugt = 1t i
BEul/	8	BEul/ 8= Z 157 ' =o 4 8
Published electrical value	0	0 20 40 60 80 100 120 40 160 180 200 220 UgV Ugt -5 % -3 -2 K 0
Published electrical value	3	1 — aHOAOHBIE; 2 — CETOYHO-aHOMHBIE (IO CETKE BTOPOIl) 1 — kpyTH3IHAA; 2 — AHONHO-CETOYHAs; 3 — CeTOYHAs
Un=	120	Un=6,3V, Ug=120V (o ceTke BTOpOIK)
Ur=	120	Ur=6,3V, Us=120V, Ugpa =120V
Published electrical value	2	1 — anode; 2 — grid-anode (for grid 2)
Un=	3	Un=63V, Ugp=120V] — transconductance; 2 — anode-grid; 3 — grid (for
grid	2	grid 2)

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
T0Ke ceTkH nepBok	1.5	TOKe ceTkH nepBok 0,5 MkA), He Gonee 1,5 0.5 KA, MAX. ...ttt e, 1.5