



ELECTRONIC TUBE REFERENCE

CONSOLIDATED TECHNICAL DATA

6Z38P

1 SECTION
CONSTRUCTION
PENTODE

Voltage Pentode - High Frequency (single) electronic tube

Sharp-cutoff Russian high-frequency pentode for wideband voltage amplification to approximately 300 MHz.

GENERAL CHARACTERISTICS

BASE DESIGNATION	B7G	BASE PINS	7
NOMINAL HEATER	6.3 V / 190 mA	PARALLEL HEATER	– / –
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.0106 S
MAXIMUM PLATE VOLTAGE	300 V
MAXIMUM SCREEN VOLTAGE	160 V
MAXIMUM PLATE DISSIPATION	3 W
MAXIMUM SCREEN DISSIPATION	0.5 W
MAXIMUM CATHODE CURRENT	20 mA
English-primary bilingual extraction; published ratings promoted where clear.	

PENTODE 6381 kot 6381 mperHasHauweH I IIHPOKOMOJIOCHOIrO pentode has been designed for wide-band 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
PENTODE	6381	PENTODE 6381
BBICOKOYACTOTHBINA NEHTOJ ¢ KOPOTKOH XapaKTepHC- The	6	BBICOKOYACTOTHBINA NEHTOJ ¢ KOPOTKOH XapaKTepHC- The 6X3811 high-frequency short-characteristic
kot	6381	kot 6381 mperHasHauweH I IIHPOKOMOJIOCHOIrO pentode has been designed for wide-band amplification
YCHJIEHHA HATpsKeHHA BBICOKOH dacToThI go	300 MHz	YCHJIEHHA HATpsKeHHA BBICOKOH dacToThI go 300 MI'n of h.f. voltage at up to 300 MHz in electronic devices.
Published electrical value	3	1 — ceTka meppas; 2 — KaTOM, CETKA TPETHA H IKpaH; 3 — mojgor-
Published electrical value	6	7 peBarenh; 4 — OOOOTPEBaTeNb; 5 — aHO; 6 — CETKA BTOnad;
Published electrical value	3	3 g pl 7 — KaTOH, CETKA TPETHS M 3KpaH
Published electrical value	3	3 /% f) Diagram of electrodes-to-pins connection:
Published electrical value	3	7 1 — grid 1; 2 — cathode, grid 3 and screen; 3 — heater;
Published electrical value	3	4 — heater; 5§ — anode; 6 — grid 2; 7 — cathode, grid 3
BufpanuoHssle HATPY	80 Hz	BufpanuoHssle HATPY3KA B OUNaNa3OHE 4acTOT OT 1 Vibration: at frequencies from 1 to 80 Hz with
HATPY	15	HATPY3KH C yckopenneM xo 15 g. TemmepaTypa okpyxaio-

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
HAKAMA oieevrnevnnronrnnsnecsonannsansonn	6.3	HAKAMA oieevrnevnnronrnnsnecsonannsansonn 6,3 Reater ... i i e e e 6.3
AHOMA + v v vveveevmninannsneereenenennneenns	150 V	AHOMA + v v vveveevmninannsneereenenennneenns 150 -+
CETKH BTOPOH ciiiniiiiinennenanens	100	CETKH BTOPOH ciiiniiiiinennenanens 100 -4 T 1SN P 100
CETKH TPETBEH t viieinr e iian e 0	0	CETKH TPETBEH t viieinr e iian e 0 grid 3 Li e 0
HAKATA oo v veieenaraesooconesesonnnsoeeannes	20 V	HAKATA oo v veieenaraesooconesesonnnsoeeannes 190+20
AHOMA o ovvvervennnnsannonesrsnesnensonseenns	4	AHOMA o ovvvervennnnsannonesrsnesnensonseenns 12+4 heater ttt
CETKH BTOPOM . .vinvieeereecnnonanennsens	4	CETKH BTOPOM . .vinvieeereecnnonanennsens 1,8+17 anode ... et 12+4
COOpOoTHBIEHME B LENH KATOAA A	1.7	COOpOoTHBIEHME B LENH KATOAA A1 aBTOMATHYECKOTO -3 o 1« 17 1.8+1.7
cMemeHHA, OM ovniiniinii e	82 Ohm	cMemeHHA, OM ovniiniinii e 82 Resistance in cathode circuit for automatic bias, Ohm' 82
BryTpennee conporuBnenne, KOM	280 kOhm	BryTpennee conporuBnenne, KOM 280 Internal resistance, kOhm ccviieanen 280
DKBHBANEHTHOE CONPOTHBIEHHE IyMOB, OM	500 Ohm	DKBHBANEHTHOE CONPOTHBIEHHE IyMOB, OM 500 Equivalent noise resistance, Ohm 500
KpyTtazHa xapaktepactax®, MA/B	2.5 V	KpyTtazHa xapaktepactax®, MA/B 10,6_3,6 Transconductance, mA/V ccviviieennn 10.6-2.5
00	0.2	OO6paTHBIH TOK CeTKH HOepBOH, MKA =0,2 Inverse grid 1 current, LA coiiiiiiinn =0.2
BXOIMHAR oo vvversvnsnnananaansoeenasenesenss	8	BXOIMHAR oo vvversvnsnnananaansoeenasenesenss 5,8i\$:§ o011 5 8::;%
BBIXOOHAM . .ouvevvnvnernosnnsronnesnnnonsons	0.9	BBIXOOHAM . .ouvevvnvnernosnnsronnesnnnonsons 3,1+0,9 [T

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
TPOXOMHAT . .vvvnrnrvvnnncnonnnnsnonannsnsos =	0.02	TPOXOMHAT . .vvvnrnrvvnnncnonnnnsnonannsnsos =0,02 ranSfer it =0.02
OnexTprEyecKkne napaMerpsl B TedeHre	3	OnexTprEyecKkne napaMerpsl B TedeHre 5000 4 3kcmny-
aTaudH: Electrical parameters over	5000	aTaudH: Electrical parameters over 5000 operating hours:
KPYTH	6.5 mA	KPYTH3HA XapaxTepHcTEKE, MA/B =6,5 transconductance, mA/Y ... ooiiiieiiii =6.5
Published electrical value	500 mA	0BpaTHBI TOK CETKH HEPBON, MKA =0,5 inverse grid 1 current, A t =0.5
B e	5.7	B e 70 37 heater 7.0 5.7
DR	300	DR 3AmEDTOH TAMIE 200 anode iiiiinnan.. 300
aroza nip P e anode in out-off valve	400	aroza nip P e anode in out-off valve 400
CCTKH BTOPOH	160	CCTKH BTOPOH 160 grid 2 160
CETKH BTOPOH IPH	400	CETKH BTOPOH IPH 33TepTOH 1aM- w00 grid 2 in cut-off valve 400
Published electrical value	120	1 - T between cathode and heater ... 120
TIEM o iie i	20 mA	TIEM o iie i 120 Cathode current (average value), mA 20
Tox xatona (CpennHee	20 mA	Tox xatona (CpennHee 3HaveHme), MA 20 L
pacceMBaeMasi aHOAOM	3	pacceMBaeMasi aHOAOM 3 atanode c..0..n 3
paccemBacMast ceTko BT0po0it	0.5	paccemBacMast ceTko BT0poOit 0,5 atgrid 2 l 0.5
Published electrical value	1 MOhm	s0l. MOM 1 Resistance in grid 1 circuit, MOhm 1
HArpeTold	120	HArpeTold 4YacTW NpOTHB aHona), °C 120 against anode), °C 120
Published electrical value	301 A	30— A EERTENNEEEEE 301 LR I
N b ESans A	4 A	N b ESans A 4
o -U[:y =	0.5	o -U[:y = 0.5y -lv/—l,ivfzv
zj}l ijfm	443	zj}l ijfm 443V A5, @ ol = - L

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	7.6 V	1 YAy, yaAV.av. 7,6V Y e v
BKJ	2	BKJ1IO9CHHE); 1 — aHOAHBIE, 2 — CETOYHO-aHOAHBIE (IO CeTKe BTOPO#H);
Published electrical value	3	1 — mar6opmas OOmMyCTEMas MOIIHOCTD, PacceABacMas 3 — HaumbonbImasg OONYCTHMasA MOIIHOCTh, pacceHBae-
adonoMm (	2.5	adonoMm (3,15 Br) Mas aHonoM (2,5 BT)
Published electrical value	3 A	1 — a"omHBle; 2 — CETOYHO-aHOOhbIE (O CeTKe BTOpOH); 3 —
T sible anode dissipation (	2.5 W	T sible anode dissipation (2.5 W)
Published electrical value	0 mA	4.0 PRI S A S S S 0 S S s g D Y
Published electrical value	200	g 50 100 150 200 UgV
UpV	-1	UpV -5 =4 =3 -2 -1 @
Published electrical value	2	1 — Tox aHOna; 2 — TOK CETKH BTODOH; 3 — KpPYTHHA; ! — TOK aHOpa; 2 — TOK CeTKM BTODOH; J — KpYyTH3Ha:
Published electrical value	200	4 — BXONHOE COMPOTHB/IEHHE Ha yacToTe 200 MI'n 4 — BXOIHOE COmpOTHBJeHHE Ha yacTToTe 200 MIu
Published electrical value	3	1 — anode current; 2 — grid 2 current; 3 — trans- ! — anode current; 2 — grid 2 current; 3 — trans-
conductance	200 MHz	conductance; 4 — input resistance at 200 MHz conductance; 4 — input resistance at 200 MHz
ugsatr	10	ugsatr 3sv [[sovAasv /lzav 15y 10v
TR	-1 A	TR 35V A Ppd A7 I -1 //, // AV]
KIALT vl	25	KIALT vl 4 + -Lo7 4 //Z" g1 25V]
! — TOK aHOJA B HMNYJNBCE	2	! — TOK aHOJA B HMNYJNBCE; 2 — TOK CETKH B UMMY/bCe [— TOK aHOIA B HMIOyNbCe; 2 — TOK CETKH B HMIIYJbCE
Averaged pulse characteristics (grid	2	Averaged pulse characteristics (grid 2 is connected with Averaged pulse characteristics (grid 2 is connected with
I — anode pulse current	2	I — anode pulse current; 2 — grid pulse current 1 — anode pulse current; 2 — grid pulse current

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
triode)	3	triode): 1 — anode; 2 — grid-anode (for grid 2); 3 — maximum
Published electrical value	2.5 W	1 — maximum permissible anode dissipation (3.15 W) permissible anode dissipation (2.5 W)
Published electrical value	3	-2 5Vi 1 — anode; 2 — grid-anode (for grid 2); 3 — maximum permis-