

ELECTRONIC TUBE REFERENCE

6P9

Power - Pentode Single (NOT beam) (under 10W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

PENTODE

Power/output pentode designed for low-frequency or audio-frequency output amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	9
NOMINAL HEATER	6.3 V / 780 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
PLATE RESISTANCE	80000 Ω
TRANSCONDUCTANCE	0.0105 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	250 V
MAXIMUM PLATE DISSIPATION	9 W
MAXIMUM SCREEN DISSIPATION	2 W
Published electrical characteristics and permissible ratings promoted where OCR labels were unambiguous; remaining published numeric table entries retained in TUBE_SECTION_PARAMETER.	

Indirectly heated power pentode intended for audio-frequency output 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
Brixonnoit nenron	6	Brixonnoit nenron 6I19 npenmasHaven mnsg ycu- The 6I19 output pentode is designed for power
Breixoaneie nmentombt	6	Breixoaneie nmentombt 6I19 BoimyckaioTes B Me- The 6I19 output pentodes are enclosed in metal
Brixonusle nenroast	6	Brixonusle nenroast 6I19 ycrofiuuenl K BO3neil-
CTBHIO OKpyXKawollefl TeMmIepaTypw ot –	6	CTBHIO OKpyXKawollefl TeMmIepaTypw ot — 60 10 The 6I19 output pentodes are resistant to am-
XaHHYeCKHX Harpys	2.5	XaHHYeCKHX Harpys3ok: BuUOpanuoHHBEIX 10 25 g, to mechanical loads: vibration loads up to 2.5 g
YIZapHbIX MHOpOKpaTHBIX g	12	YIZapHbIX MHOrOKpaTHBIX g0 12 g. and multiple impact loads up to 12 g.
TapanTtupoBanras gosarosedHocTb	2000	TapanTtupoBanras gosarosedHocTb 2000 uacos. Service life guarantee: 2000 hr.
%) Ipu	7	%) Ipu 7 _
At Ugl~@ein =	10	At Ugl~@ein =21V, R, =10kQ.
cglk	1.56 pF	cglk 13+1,56 pF
Cgla <	0.06 pF	Cgla < 0,06 pF
NMPENEJBHO NONYCTUMBIE	3	NMPENEJBHO NONYCTUMBIE 3KCNIJAYATAILHOHHBIE NAHHBIE
Published electrical value	1	1) Ilpy aBTOMATHYECKOM CMELIEHUH,
Published electrical value	2	2) Ilpu GUKCHPOBAHHOM CMELIEHHH.
BbIx	9	BbIx0aHOH neHTOn 6 l-l 9
Published electrical value	2	2 b = Torov / / / ' \ ; Q }

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
N <iams iss	5 A	N <iams iss 5 // A /\f" {/,lo
gl i Ty Sy Blil [— — — ""fé? B // /g/ '//' / </	0	gl i Ty Sy Blil [— — — ""fé? B // /g/ '//' / </0Q""
Published electrical value	3	0 100 200 300 200 g¥ YtV =10 -8 -6 -4 -2 /3
et Ugp=	300 V	et Ugp=150 V — — =1 U, =300V
Published electrical value	9	6 rl 9 BoixoHOM neHTOj,
alff . /	18	alff . / - 18Y
Published electrical value	17 V	g 100 200 300 Ua.V 0 05 A0 17 Ugi~ VIESS)
I =	1	I =1(Uy) P =1 (Ugimerr)
(Tpm.);:moe BKJII0' {.EHHE) U, =	-3	(Tpm.);:moe BKJII0' {.EHHE) U, =63V U, =—3V
(triode connection) U =	10	(triode connection) U =300V Rg* 10 kO
Ugo=	150 V	Ugo=150 V
P AREINY = ~	212	P AREINY = ~-4/212"
Published electrical value	4	T 17 16 RpnR2 4
Published electrical value	600 A	100 200 300 400 500 600 A UgV
P, k=	1 uA	P, k=1 (Ra) I imp Igl imp f (Ua)
P, U,=	63	P, U,=63V (TpHOAHOE BKJIOUEHHE)
— — -k; U,=	300	— — —k; U,=300V (triode connection)
Ug	63	Ug2=150V I imp U,=63V
Uy==	100	Uy==3V — = —Liiimp fimp = 100 kHz
Ugeri=	2	Ugeri=21V T=2 ps
Output pentode	619	Output pentode 619
Ygr em=	100 V	Ygr em=100 V
Published electrical value	48	48 N > Ug ump TN,
I, imp? Ig	1 uA	I, imp? Ig2imp =1 (Ua) < N
L, imp U,=	63	L, imp U,=63V N } Ny
— — -Loimp Ugy =	150 V	— — —Loimp Ugy =150 V N
fimp=	8 A	fimp= 100 Hz ""b.' 08 A /
Published electrical value	18	16 Uyt o 100¥ 18 §
Published electrical value	3	3 L'N ^ggyfimp100F]
sov	3	sov 14— 1/3
Published electrical value	1	/1IN [dov

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical value	80	0 20w 60 80Uyuml
~ - ~leimp Ugo =	300	~ - ~leimp Ugo =300V Igl imp = f (Ugl imp)
fimp =	100	fimp = 100 Hz U, =63V Fimp = 100 Hz

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Haunboupumii Bec	47	Haunboupumii Bec 47 e Maximum weight: 47 gr.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1968 Mazda Belvu

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

1968 MAZDA BELVU

Section 1 · Pentode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Heater voltage secrrecerernseriieenserecncoce VÊ	6.3 V	—
Heater current ...æIf	450 mA	—
Dissipation d'AN0d@ ssereseeesensereenencessercecen. Pâ	9 W	—
Screen-grid dissipation Æ..... ceseerenverresessenseccienes P 8	2 W	—
Tension de crête entre filament et cathode 0 VfK	50 V	—
Tension d'AN0dE ... v.sercrerirenseenmennentesesressensnoncemaseesseveess V	250 V	—
Screen-grid voltage Vg	250 V	—
Tension de grille n° 1. Ve	-6 V	—
Plate current à signal nul aenaserserrennecnaerencrsecerencers 10 SI0	30 mA	—
Coutant de grille n° 2 à signal nul mrrsseesesesecemesses 182 SiS0	3 mA	—

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance c aacnsasncesessncensecccosemerecanaecenseuneneese 1D	7 mA/V	—
Résistance de charge d'anode, ... Ra	7 kΩ	—
Tension d'ENtrÉE sesricreimenentesençesentesecene VE	4.2 V _{eff}	—
Puissance d@€ S0rtIE ussesseeessessenesessssmsinmes. PS	3.5 W	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Capacitance d'entrée ...n CE	8 pF	InterelectrodeCapacitance
Capacitance de sortie Cs	5.5 pF	InterelectrodeCapacitance



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

1970 Russian Tubes Mashpriborintorg

SOURCE PDF

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

1970 RUSSIAN TUBES MASHPRIBORINTORG

Section 1 · Pentode

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Source symbol U,	63 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol I,	65±25 mA	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol I,	650+40 mA	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol U,	300 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Source symbol I,	30+10 mA	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Uy,	150 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol cglk	13+1.56 pF	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Cgla	< 0.06 pF	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Source symbol U,	69 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol V	15 W	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol U,	330 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Uy	100 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Ug2	330 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Pa	9 w	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol BbIx	0 a	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.