



ELECTRONIC TUBE REFERENCE

6P20S

Power - TV Horizontal Output (sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

BEAMPOWER

Russian rugged output beam tetrode for substantial general power service, rated around 27 W plate dissipation; available sources do not explicitly establish horizontal-deflection service.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	6.3 V / 2.5 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Beam Power	
PLATE RESISTANCE	7000 Ω
TRANSCONDUCTANCE	0.0075 S
MAXIMUM PLATE VOLTAGE	450 V
MAXIMUM SCREEN VOLTAGE	450 V
MAXIMUM PLATE DISSIPATION	27 W
MAXIMUM SCREEN DISSIPATION	3.6 W
MAXIMUM CATHODE CURRENT	200 mA
<i>Published electrical characteristics and permissible ratings promoted where OCR labels were unambiguous; remaining published numeric table entries retained in TUBE_SECTION_PARAMETER.</i>	

Output beam tetrode 61120C Buixonsoii ayuesoil terpona 6I120C npennasua- The 6I120C output beam tetrode is designed for Output beam tetrode

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 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Output beam tetrode	61120	Output beam tetrode 61120C
Buixonsoii ayuesoil terpona	120	Buixonsoii ayuesoil terpona 6I120C npennasua- The 6I120C output beam tetrode is designed for
Brixoaubie ayuesbie Terponabpl	6	Brixoaubie ayuesbie Terponabpl 6I120C suimycka- The 6I120C output beam tetrodes are enclosed
BrixonHble nyuesbie TeTpoiassi	61120	BrixonHble nyuesbie TeTpoiassi 61120C yeroitunBn
The	6	The 6T120C output beam tetrodes are resistant
K B0	-60	K BO3JleHCTBHIO OKPY»Katllell Temnepatypnl oT —60
Published electrical value	98	00 + 70°C wu oTHOCHTeAbHOHN BJaxKHOCTH 95—98 Y,
npu remnepatype	20 A	npu remnepatype +20°C, a TakXKe X BO3NEHCTPYIO
as to mechanical loads: vibration loads up to	2.5	as to mechanical loads: vibration loads up to 2.5 g
MEeXaHWUECKUX Harpy	2	MEeXaHWUECKUX Harpy3oK: BHODaHOOHHBIX 10 2,0 g,
and multiple impact loads up to	12	and multiple impact loads up to 12 g.
yAapHHIX MHOpOKpaTHyX Ko	12	yAapHHIX MHOpOKpaTHyX Ko 12 g.
[apanTupoBannas poaposedHocTs	500	[apanTupoBannas poaposedHocTs 500 uacos. Service life guarantee: 500 hr.
Published electrical value	1	1) JI;ist aBTOMATHYECKOTO CMELICHHS.
CgIk	22.5 pF	CgIk 22,5 pF
Cak	10 pF	Cak 10 pF

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
C gla	0.8 pF	C gla 0,8 pF
NPEAENBHO JONYCTUMDBIE	3	NPEAENBHO JONYCTUMDBIE 3KCNJAYATAILHOHHBIE JAHHBIE
Uy	50	Uy, 69V 57V Ugl ~50V
Published electrical value	-200 V	U, 450 V Ugl imp —200V
U, imp Yy	27 kV	U, imp Yy +6,8 kV P, 27 W
U, tmp	36 W	U, tmp 2y —1,5kV sz 36 W
UgZ	200	UgZ 3 700V Tsammona 200° C
Published electrical value	16	1) Tpn << 12 ps, ferp, paseeprn <= 16 kHz
At <	16	At <12 ps, foap <16 kHz
Published electrical value	0	2y ITpu I,=0.
Published electrical value	3	4) CpenHee 3Hauenue,
Published electrical value	3	5} TTuxoBoe 3Hauenue.
Published electrical value	20	6' 20C BrixonHoil JiyueBo#i TeTpon
Published electrical value	8	8min
i&	5	i&5 max
Published electrical value	10	400 \ ~10y L Luop
ey N	-25	ey N -25v YARYARYIP
ZI	100	ZI2 NS o 35V Sigz=200v/ 150}/ 100Y
Published electrical value	50 V	100 50 Ug,V Upr ¥

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Hauboapmuii Bec	75	Hauboapmuii Bec 75 e. Maximum weight: 75 gr.



SOURCE DATA APPENDIX

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1970 Russian Tubes Mashpriborintorg

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

1970 RUSSIAN TUBES MASHPRIBORINTORG

Section 1 · Beam Power

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 S	85+25 mA/V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol I,	25+025 A	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol I,	90+32 mA	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol u,	173 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol I,	<10 mA	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Cgk	22.5 pF	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Cak	10 pF	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol gla	0.8 pF	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Source symbol Uy,	69 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Ugl	~50 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol U,	450 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Source symbol P,	27 W	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol sz	36 W	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.
Source symbol Ug2	200 V	Published bilingual datasheet table; source symbol preserved because OCR/notation may be ambiguous.



SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1981 Russian Tubes Katsnelson and Larionov

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

1981 RUSSIAN TUBES KATSNELSON AND LARIONOV

Section 1 · Beam Power

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Nominal heater voltage	6.3 V	Published source value
Nominal heater current	2.5 A	Published source value
Transconductance	7500 μ S	Published operating point
Plate resistance	7000 Ohm	Published operating point
Guaranteed service life	500 h	Published source value

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Positive pulse plate voltage when cut off	6800 V	TelevisionLineOutput

TUBE TINKER

An independent reference for electronic tubes, vacuum tubes, and their source documents.

