



ELECTRONIC TUBE REFERENCE

6E1P

Tuning Indicator electronic tube

CONSOLIDATED TECHNICAL DATA

2 SECTIONS

CONSTRUCTION

TRIODE-TUNING INDICATOR

Russian electron-ray indicator combining a triode control system with a fluorescent crater-anode display.

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	Dissimilar

SECTION RATINGS

SECTION 1 Tuning Indicator	
TRANSCONDUCTANCE	0.0005 S
AMPLIFICATION FACTOR	24
MAXIMUM PLATE DISSIPATION	3 W
Electrical data extracted only from filename-designated tube block.	

SECTION 2 Triode	
MAXIMUM PLATE DISSIPATION	0.2 W

DuexTpoHHO-cBeTOBOH MHaukaTop 6E1Il nneanasua- The 6E1IT electron-ray valve has been designed to] — triode grid; 2 — cathode and crater grid; 3 — crater anode; 4 — heater; 5 — heater; 6 — not connected; 7 — triode KayeCTBO CBEYEHHN aHOMA KpaTepa — NPH Haups- crater anode luminescence quality — at triode

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 · Tuning Indicator

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical data	6.3; 6.3	%f K 6,3 heater i 6.3
Published electrical data	-1; 100; 100	-1 o s - LR 100 ANOE .. e 100
Published electrical data	250; 250	AHOHA KPATEPA .+ vvveeevaanrannnrrentonanans 250 crateranode ii e 250
Published electrical data	-2	COTRHE o .iieneeesinannnnananenenennnnnnnnns -2 grid ..
Plate current	0.5 mA	COTRHE o .iieneeesinannnnananenenennnnnnnnns -2 grid .. e e -2 3aUHpaHHA TOKA aHOAA ([IPH CONPOTHBIECHHH B LE- anode current cutoff, at resistance 0.5 MOhm in
Plate current	5 mA	e e -2 3aUHpaHHA TOKA aHOAA ([IPH CONPOTHBIECHHH B LE- anode current cutoff, at resistance 0.5 MOhm in ng aiona 0,5 MOM) ... iiiiiiiiii, —15+5 anodecircuit i —15f5
Plate current	5 mA	3aUHpaHHA TOKA aHOAA ([IPH CONPOTHBIECHHH B LE- anode current cutoff, at resistance 0.5 MOhm in ng aiona 0,5 MOM) ... iiiiiiiiii, —15+5 anodecircuit i —15f5 Tok, MxA: Current, pA:
Published electrical data	300; 25; 300; 25	HAKATIA o .overnnennoeonnsoonecnoonanansennas 300+25 heater ... e 300%25
Published electrical data	2; 1.5; 2415	AHOMA .+ vt vvveevnnnnnnncareenssseannseenennnn 2+1,5 ANOAE ... 2415
Published electrical data	<4; =4	AHONA KPATEDA ... vvveeenraanennsnnsnsnnn =<4 crater an0de =4

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Transconductance	=0.5 mA/V	AHONA KPATEDA ... vveeeennraanennsnnsnsnnn =<4 crater an0de =4 KpyTtwana xapakrepuctuxa, MA/B =0,5 Transconductance, mA/V ot =0.5
Transconductance	=0.5 mA/V	KpyTtwana xapakrepuctuxa, MA/B =0,5 Transconductance, mA/V ot =0.5 O6PaTHBIA TOK CETKH, MKA cvvveennennn., =0,5
Transconductance	=0.5 mA/V	Transconductance, mA/V ot =0.5 O6PaTHBIA TOK CETKH, MKA cvvveennennn., =0,5 [IepuHa HavanbHOro TEHEBOro CexkTopa (npd co- Inverse grid current, A it =0.5
Published electrical data	=0.5	[IepuHa HavanbHOro TEHEBOro CexkTopa (npd co- Inverse grid current, A it =0.5
Published electrical data	0.5	npoTHBHeHdsX B uenn axoda 0,5 MOM u cerxu
Published electrical data	0.5	Width of initial shadow pattern, at resistance 0.5 MOhm
Published electrical data	1; 3; 1	IMOM), MM oot it e 1+ in anode circuit and 3 MOhm in grid circuit, mm 1*!
Amplification factor	24	IMOM), MM oot it e 1+ in anode circuit and 3 MOhm in grid circuit, mm 1*! Ko3QOHImeHT yCHIEHUA . oo oo ceenennn., 24 Amplification factor
Amplification factor	24	Ko3QOHImeHT yCHIEHUA . oo oo ceenennn., 24 Amplification factor il 24
Amplification factor	4	Amplification factor il 24 QnexTpuyeckue napameTpsi B TeyeHHe 3000 4 dxyuay-
Published electrical data	3000; 4	QnexTpuyeckue napameTpsi B TeyeHHe 3000 4 dxyuay-
Published electrical data	3000	arauum: Electrical parameters over 3000 operating hours:
Plate current	-8 mA	KayeCTBO CBEYEHH aHOMA KpaTepa — NPH Haups- crater anode luminescence quality — at triode weHuM cetku Tprona —20 B u conporuBnenunm grid voltage —20 V and resistance 0.5 MOhm B pend aHopa 0,5 MOM HampsxkeHHe 3anupaHHa anode current cutoff

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Plate current	~22 mA	weHuM cetku Tprona —20 B u conporuBnenunm grid voltage —20 V and resistance 0.5 MOhm B pend aHopa 0,5 MOM HampsxkeHHe 3anupaHHsA anode current cutoff voltage, V from —8 TOKa @aHOOA, B iiiiiiiiiniinieinnan, -8...-2
Plate current	~22 mA	B pend aHopa 0,5 MOM HampsxkeHHe 3anupaHHsA anode current cutoff voltage, V from —8 TOKa @aHOOA, B iiiiiiiiiniinieinnan, -8...-22 to —22

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical data	3	Iipenenbhbhie 3HaYEHNS JOMYCTHMBIX Limit Values of Operating
Published electrical data	6.9; 3.7	HAKAMA . .oovevverme e 6.9 3.7 heater
Published electrical data	250	AHOMA vveeeveneanancncnnns 250
Published electrical data	250; 150; 250	AHONA KPATEPA v v oveennenn. 250 150 anode 250
Published electrical data	250; 150	aHoda KpaTepa B MOMEHT BKJIIO- crateranode 250 150
Published electrical data	350; 350	(=) J 350 (with cold cathode) 350
Published electrical data	100; 100	UHA/e TONOrPeBaTeNs 100 tial ... 100
Published electrical data	100; 100	o4ane HOHOI'DCBSTC{U(____ 100 tial ... 100
Plate dissipation	0.2 W	MomHocTs, pacceABaeMast aHo- L. oM, BT 02 Power dissipation at anode, W 0.2
Plate dissipation	0.2 W	MomHocTs, pacceABaeMast aHo- L. oM, BT 02 Power dissipation at anode, W 0.2
Plate dissipation	3 W	oM, BT 02 Power dissipation at anode, W 0.2 ConpoTuienne » nems CTKH rep- Resistance in grid 1 circuit, MOhm 3

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical data	1; 3	ConpoTuienne » nems CTKH rep-Resistance in grid 1 circuit, MOhm 3
Warm-up time	30 s	ConpoTuienne » nems CTKH rep-Resistance in grid 1 circuit, MOhm 3 BOM, MOM 3 Bpems pasorpesa xaToga,C 30 Cathode warm up period, s 30
Warm-up time	30 s	BOM, MOM 3 Bpems pasorpesa xaToga,C 30 Cathode warm up period, s 30
Warm-up time	30 s	Bpems pasorpesa xaToga,C 30 Cathode warm up period, s 30
Published electrical data	0; 100; 200; 300	0 100 200 300 UgV A L
Published electrical data	6.3; 250; 6.3; 250	Unh=6.3V, Uay=250V Un=6.3V, Uay=250V
Published electrical data	33	C VYcpenHeHHas XapaKTEPUCTHKA IUUA PAacTBOpA CeKTOpa B 33BHUCH-
Published electrical data	3; 30; 6.3; =250; 250; 0.5; 3	b 3 30 Un=6,3V, Uy =250 V, Ea=250 V, Rar=0,5 M, Rgr=3 MQ
Published electrical data	1	=~ Averaged characteristic of shadow pattern angle versus grid 1 voltage
Published electrical data	20; 6.3; =250; 250; 0.5; 3	X 20 Un=6.3 V, Uy =250 V, Eo=250 V, Rar=0.5 MQ, Rer=3 MQ



SOURCE DATA APPENDIX

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 · Tuning Indicator

CHARACTERISTICS		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical parameter	100 V	при Ов=6,3 В, И,=100 В, <1,,_250 В (для ЕМ80 Шак=100 В),
Published electrical parameter	6 в	6в П ЕМ80
Published electrical parameter	3 а	66Е2П ./7 3а Р