

ELECTRONIC TUBE REFERENCE

12Z3L

Voltage - Pentode electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
PENTODE

Russian pentode designed for reliable operation under ambient influences, with a manufacturer service-life guarantee of 3,000 hours. Published data describe a signal-amplifier pentode with conventional voltage-amplification operating characteristics.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	8
NOMINAL HEATER	12.6 V / 74 mA	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Pentode	
TRANSCONDUCTANCE	0.00171 S
MAXIMUM PLATE VOLTAGE	250 V
MAXIMUM SCREEN VOLTAGE	225 V
MAXIMUM PLATE DISSIPATION	2 W
MAXIMUM SCREEN DISSIPATION	0.7 W
MAXIMUM CATHODE CURRENT	11 mA
English-primary bilingual extraction; published electrical table values retained in parameters.	

12Z3L: Pentode vacuum tube from bilingual English/Russian source.

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
Source symbol B0	3 A	[Mentomm 12)K3J]I ycTOWUHBE K BO3ALHCTBHIO The 12)K3J1 pentodes are resistant to ambient
Source symbol aroseunocts	3000 W	TapautupoBanHasa poaroseunocts 3000 wacos. Service life guarantee: 3000 hr.
Service life	3000 h	TapautupoBanHasa poaroseunocts 3000 wacos. Service life guarantee: 3000 hr.
Source symbol U,	126 V	U, 126V Uy O S 1,710 mA/V
Source symbol S	1.71 mA/V	U, 126V Uy O S 1,710 mA/V
Source symbol T	74±4 mA	I, T74x4mA I, 23%himA R;Y) =09 MQ
Published electrical parameter	9 MΩ	I, T74x4mA I, 23%himA R;Y) =09 MQ
Source symbol U,	150 V	U, 150V I,) <100 pA R,Y) =05 MQ
Published electrical parameter	<100 pA	U, 150V I,) <100 pA R,Y) =05 MQ
Published electrical parameter	5 MΩ	U, 150V I,) <100 pA R,Y) =05 MQ
Source symbol Uy,	75 V	Uy, 75V I, 055035 mA Regy?) 45 kQ
Source symbol I,	55035 mA	Uy, 75V I, 055035 mA Regy?) 45 kQ
Published electrical parameter	45 kΩ	Uy, 75V I, 055035 mA Regy?) 45 kQ
Published electrical parameter	21 V	Uy, —21V P2 =>05W U® <150 mV
Published electrical parameter	>05 W	Uy, —21V P2 =>05W U® <150 mV
Published electrical parameter	250 V	2) I1IR e 100, U, =U,p =250 V, Uy oy =28 V, Rgy=20 kQ, Ry =500 Q.

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical parameter	28 V	2) I1IR e 100, U, =U,p =250 V, Uy oy =28 V, Rgy=20 kQ, Ry =500 Q.
Published electrical parameter	20 kΩ	2) I1IR e 100, U, =U,p =250 V, Uy oy =28 V, Rgy=20 kQ, Ry =500 Q.
Published electrical parameter	500 Ω	2) I1IR e 100, U, =U,p =250 V, Uy oy =28 V, Rgy=20 kQ, Ry =500 Q.
Source symbol Hast	809 A	3y Hast 809 aami.
Published electrical parameter	2 mA	) IPH § — 2 maA,
Source symbol Cgrc	3703 pF	Cgrc 3703 pF Cgla << 0,007 pF
Published electrical parameter	<0.007 pF	Cgrc 3703 pF Cgla << 0,007 pF
Source symbol Chc	402035 pF	Chc 402035 pF Ca-k < 0,007 pF
Source symbol k	<0.007 pF	Chc 402035 pF Ca-k < 0,007 pF
Source symbol I	77 mA	I 77 mA 74 mA P, 2W
Source symbol mA	74 mA	I 77 mA 74 mA P, 2W
Source symbol P,	2 W	I 77 mA 74 mA P, 2W
Source symbol U,	250 V	U, 250 V Pgp 07 W
Source symbol Pgp	7 W	U, 250 V Pgp 07 W
Source symbol U,	300 V	U, 300V I I1 mA
Source symbol I	1 mA	U, 300V I I1 mA
Source symbol Ug2	225 V	Ug2 225 V Uy, 250V
Source symbol Uy,	250 V	Ug2 225 V Uy, 250V
Source symbol y	300 V	Ug2 1)y 300V
Source symbol Uy	0 V	Uy -0V ARSy
Published electrical parameter	6 A	6 A 4
Published electrical parameter	4-1.5 V	4 -1,5V— \
Published electrical parameter	-3 V	-3V -
Published electrical parameter	128 V	U,=128V —, U, =126V
Published electrical parameter	126 V	U,=128V —, U, =126V

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Published electrical parameter	75 V	$U_y = 75V - \text{---} -1, U = 150V$
Published electrical parameter	150 V	$U_y = 75V - \text{---} -1, U = 150V$
Published electrical parameter	3 A	13 3ax. 738 193
Source symbol o	5 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Published electrical parameter	-1 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Source symbol v	-15 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Source symbol v	-2 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Published electrical parameter	-2.5 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Source symbol V	-3 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Source symbol V	35 V	$\backslash N \backslash N \text{ vgr-av-o5v}] -1v -15v -2v -2.5V -3V 35V -41 I / S$
Published electrical parameter	2 W	2 WD A T/17 1A 1/ 7
Published electrical parameter	1 A	2 WD A T/17 1A 1/ 7
Source symbol w	4 A	= w4 A
Published electrical parameter	200 μA	0 & 0 100 150 200 $U_a.V$ 0 100 200 U,V

TUBE TINKER

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