

ELECTRONIC TUBE REFERENCE

GK12A

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TRIODE

Russian triode for RF or general electronic service; available source material does not establish a narrower functional role confidently.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Triode

No fixed ratings recorded.

Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table.

MOLWHBIA reHepaToOPHbLIN TPUOL C MarHUTHOW ϕo- The TK-12A power triode with a magnetically fo- Cathode: directly heated, carbonized thoriated tungsten. S @190+1,0 Envelope: metal-ceramic with an external copper anode. K1, K2 — xarop; | - KOHTaK- Cooling: forced (water for anode, air for envelope).

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1968 Electronintorg

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

1968 ELECTRONINTORG

Section 1 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
power triode with a magnetically fo	12 W	MOLWHBIA reHepaToOPHbLIN TPUOL C MarHUTHOW ϕo- The TK-12A power triode with a magnetically fo-
power generation [1]	3 W	KYCMPOBKOM 3NEKTPOHHOro notoka 'K-12A npeaHas- cused electron flux is used for the RF power generation
power generation [2]	12 W	KYCMPOBKOM 3NEKTPOHHOro notoka 'K-12A npeaHas- cused electron flux is used for the RF power generation
Cathode: directly heated, carbonized thoriated tungsten. S @ [1]	190	Cathode: directly heated, carbonized thoriated tungsten. S @190+1,0
Cathode: directly heated, carbonized thoriated tungsten. S @ [2]	10	Cathode: directly heated, carbonized thoriated tungsten. S @190+1,0
anode; K1, K2 [1]	3	3 4 A -anode; K1, K2-
anode; K1, K2 [2]	4	3 4 A -anode; K1, K2-
grid	400	Height: at most 400 mm. g P cathode; C - grid;
temperature, °C [1]	-10 C	TemnepamTypa okpyxatowein cpegel, °C —-10—+55 Ambient temperature, °C
temperature, °C [2]	55 C	TemnepamTypa okpyxatowein cpegel, °C —-10—+55 Ambient temperature, °C
voltage (ACorDC), V	6 V	HanpspeHue Hakana (nepemeHHoe unn Filament voltage (ACorDC), V 6
anode [1]	250 uS	TOKHAKANa, A ciuiiriiiannnnnnnn, 250-300 Mutual conductance (at anode voltage 1 kV, anode

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
anode [2]	-300 uS	TOKHAKANa, A ciuiiriiiannnnnnn, 250-300 Mutual conductance (at anode voltage 1 kV, anode
anode [3]	1 uS	TOKHAKANa, A ciuiiriiiannnnnnn, 250-300 Mutual conductance (at anode voltage 1 kV, anode
currents [1]	5 uA	KpyTuaHa xapakTepuK (Mpu HanpshkeHun currents 5 and 7 A, magnetic field intensity
currents [2]	7 uA	KpyTuaHa xapakTepuK (Mpu HanpshkeHun currents 5 and 7 A, magnetic field intensity
voltages [1]	950150 kV	HanNpsXXeHHOCTU MarHUTHOro nonsa 950150 3), Gain coefficient (at anode voltages 1 and 5 kV,
voltages [2]	3 kV	HanNpsXXeHHOCTU MarHUTHOro nonsa 950150 3), Gain coefficient (at anode voltages 1 and 5 kV,
voltages [3]	1 kV	HanNpsXXeHHOCTU MarHUTHOro nonsa 950150 3), Gain coefficient (at anode voltages 1 and 5 kV,
voltages [4]	5 kV	HanNpsXXeHHOCTU MarHUTHOro nonsa 950150 3), Gain coefficient (at anode voltages 1 and 5 kV,
current [1]	45 mA	MA/B,HEMEHEE ccciiunninanan.. 45 anode current 5 A, and magnetic field intensity
current [2]	5 mA	MA/B,HEMEHEE ccciiunninanan.. 45 anode current 5 A, and magnetic field intensity
grid [1]	11 A	11n5kB, ToKe aHoaa 5 A, HaNPSHPKEHHOCTH Peak anode current (at anode voltage 1 kV, grid
grid [2]	5 A	11n5kB, ToKe aHoaa 5 A, HaNPSHPKEHHOCTH Peak anode current (at anode voltage 1 kV, grid
grid [3]	1 A	11n5kB, ToKe aHoaa 5 A, HaNPSHPKEHHOCTH Peak anode current (at anode voltage 1 kV, grid
voltage [1]	950 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,
voltage [2]	50 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage [3]	3 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,
voltage [4]	140 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,
voltage [5]	-100 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,
voltage [6]	1000 V	marHuTHoro nons 950+50 3), He MeHee 140 voltage —100 V, peak excess grid voltage 1,000 V,
Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity [1]	950	Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity 950+50 Oe), A, atleast. ... 40
Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity [2]	50	Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity 950+50 Oe), A, atleast. ... 40
Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity [3]	40	Tok aHoga B MNynbCe (Npy HaNPshKEHUAX magnetic field intensity 950+50 Oe), A, atleast. ... 40
anode [1]	1 kV	aHopa 1 kB, ceTku ~100 B, HanpsHkeHUn Negative cutoff voltage (at anode voltage 10 kV, anode
anode [2]	100 kV	aHopa 1 kB, ceTku ~100 B, HanpsHkeHUn Negative cutoff voltage (at anode voltage 10 kV, anode
anode [3]	10 kV	aHopa 1 kB, ceTku ~100 B, HanpsHkeHUn Negative cutoff voltage (at anode voltage 10 kV, anode
current [1]	1000 mA	npesbIWeHnA ceTku B umnynsce 1000 B, current 0.1 A, magnetic field intensity 950+50 Oe),
current [2]	0.1 mA	npesbIWeHnA ceTku B umnynsce 1000 B, current 0.1 A, magnetic field intensity 950+50 Oe),
current [3]	950 mA	npesbIWeHnA ceTku B umnynsce 1000 B, current 0.1 A, magnetic field intensity 950+50 Oe),
current [4]	50 mA	npesbIWeHnA ceTku B umnynsce 1000 B, current 0.1 A, magnetic field intensity 950+50 Oe),
Interelectrode capacitance, pF, max	40 pF	AHEMEHEE c"iitiennnnnnnnnn. 40 Interelectrode capacitance, pF, max.:

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
cathode	3	HanpsixxeHue 3anupanus oTpulaTtesnbHoe (npu grid-cathode
anode [1]	10	Hanpshxennn aHoga 10 kB, Toke aHoga 0,1 A, grid-anode 90
anode [2]	1	Hanpshxennn aHoga 10 kB, Toke aHoga 0,1 A, grid-anode 90
anode [3]	90	Hanpshxennn aHoga 10 kB, Toke aHoga 0,1 A, grid-anode 90
POWER TRIODE	12 W	NK-12A POWER TRIODE
cathode [1]	950150	HaNPAXXEHHOCTU MarHuTHOro nons 950150 3), anode-cathode
cathode [2]	3	HaNPAXXEHHOCTU MarHuTHOro nons 950150 3), anode-cathode
voltage [1]	3 W	abconioTHoe 3HageHve, B, Hebonee 60 Output power (at 1 MHz, anode voltage 10kV,
voltage [2]	60 W	abconioTHoe 3HageHve, B, Hebonee 60 Output power (at 1 MHz, anode voltage 10kV,
voltage [3]	1 W	abconioTHoe 3HageHve, B, Hebonee 60 Output power (at 1 MHz, anode voltage 10kV,
voltage [4]	10 W	abconioTHoe 3HageHve, B, Hebonee 60 Output power (at 1 MHz, anode voltage 10kV,
voltage [1]	6 V	MexsnekTpogHsle eMkocTu, nd, He 6onee: filament voltage 6.0 V, magnetic field intensity
voltage [2]	6 V	MexsnekTpogHsle eMkocTu, nd, He 6onee: filament voltage 6.0 V, magnetic field intensity
voltage (ACorDC),V [1]	57 V	HanpsixxeHwe Hakana (nepeMeHHoe unu Filament voltage (ACorDC),V 57-6.3
voltage (ACorDC),V [2]	-6.3 V	HanpsixxeHwe Hakana (nepeMeHHoe unu Filament voltage (ACorDC),V 57-6.3
voltage (DC), kV [1]	57 kV	 5,7-6,3 Anode voltage (DC), kV
voltage (DC), kV [2]	-63 kV	 5,7-6,3 Anode voltage (DC), kV
voltage, V (absolute value) [1]	11 V	Hanpspkenve aHoga (noctosHHoe), kB 11 Negative bias voltage, V (absolute value) 1,000

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage, V (absolute value) [2]	1000 V	Hanpspkenve aHoga (noctosHHoe), kB 11 Negative bias voltage, V (absolute value) 1,000
current (DC component), A [1]	3 A	(abconioTHoe 3HaveHne), B L. 1000 Anode current (DC component), A 7.5
current (DC component), A [2]	1000 A	(abconioTHoe 3HaveHne), B L. 1000 Anode current (DC component), A 7.5
current (DC component), A [3]	7.5 A	(abconioTHoe 3HaveHne), B L. 1000 Anode current (DC component), A 7.5
current (DC component), A	430 A	MyckoBor TOK HaKana, A 430 Grid current (DC component), A
Tok aHoga (nocTosHHAA cocTasnsowas), A	75	Tok aHoga (nocTosHHAA cocTasnsowas), A 7,5 Magnetic field intensity, E
Dissipation, W	3 W	Tok ceTkun (NOCTOAHHAA cocTaBnawowan), A 0,3 Dissipation, W:
anode [1]	3	HanpspkeHHOCTL MarHUTHOro NoNs, 3 900-1000 anode 2.510*
anode [2]	900	HanpspkeHHOCTL MarHUTHOro NoNs, 3 900-1000 anode 2.510*
anode [3]	-1000	HanpspkeHHOCTL MarHUTHOro NoNs, 3 900-1000 anode 2.510*
anode [4]	2.51	HanpspkeHHOCTL MarHUTHOro NoNs, 3 900-1000 anode 2.510*
grid	500	Paccensaemas MOWHOCTb, BT: grid .. 500
frequency, MHz [1]	25 MHz	e 2,5-10* Operating frequency, MHz 30
frequency, MHz [2]	-10 MHz	e 2,5-10* Operating frequency, MHz 30
frequency, MHz [3]	30 MHz	e 2,5-10* Operating frequency, MHz 30
Temperature at envelope (hottest point), °C [1]	500 C	o= (e 500 Temperature at envelope (hottest point), °C 150
Temperature at envelope (hottest point), °C [2]	150 C	o= (e 500 Temperature at envelope (hottest point), °C 150
Published electrical value [1]	8	8 U, = 6 V; magnetic field intensity
Published electrical value [2]	6	8 U, = 6 V; magnetic field intensity
g U, = [1]	6	g U, = 6 V; magnetic field intensity (N) 100

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
g U, = [2]	100	g U, = 6 V; magnetic field intensity (N) 100
Published electrical value [1]	200	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [2]	400	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [3]	600	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [4]	600	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [5]	1000	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [6]	14	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)
Published electrical value [7]	6	200 400 600 600 1000 Vg, 14 U, = 6 V; magnetic field intensity (N)

TUBE TINKER

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

[Catalog](#) [Tube types](#) [Full books](#) [Blog](#) [Feedback & corrections](#)

© 2026 Tube Tinker