

ELECTRONIC TUBE REFERENCE

GU84B

Power - Tetrode (NOT beam) electronic tube

CONSOLIDATED TECHNICAL DATA
1 SECTION
CONSTRUCTION
TETRODE

Transmitting power tetrode designed for RF amplification, linear/SSB service, oscillation, modulation, broadcasting, or frequency multiplication.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	27 V / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
MAXIMUM PLATE VOLTAGE	4250 V
MAXIMUM SCREEN VOLTAGE	400 V
Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table. REDO promoted-field audit completed from English Limit Operating Values / Electrical Parameters tables.	

The GU-84B tetrode is used in sideband signal-amplifier circuits in RF equipment at frequencies up to 250 MHz. It has an indirectly heated oxide-coated cathode, metal-ceramic envelope, and forced-air cooling.

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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
sideband signal amplifier cir- N	99	sideband signal amplifier cir- N 99
power amplifiers +	7 W	cuits and as power amplifiers +7 I
grid [1]	1	, \ K — cathode; T ~ heater; C1 — grid 1; C2 — grid 2;
grid [2]	2	, \ K — cathode; T ~ heater; C1 — grid 1; C2 — grid 2;
anode	1	y'a 1 ol g K'Q A - anode
temperature, °C — [1]	147 C	CYCKOPEHWeM, M/C? 147 Ambient temperature, °C —10t0 +70
temperature, °C — [2]	-10 C	CYCKOPEHWeM, M/C? 147 Ambient temperature, °C —10t0 +70
temperature, °C — [3]	70 C	CYCKOPEHWeM, M/C? 147 Ambient temperature, °C —10t0 +70
voltage	750 V	HanpshkeHve cmelleHns oTpulaTensHoe Negative bias voltage (at anode voltage 750 V,
current [1]	750 mA	(npw Hanpskenun aHoaa 750 B, HanpsbkeHnn grid 2 voltage 375 V, anode current 2,000 mA),
current [2]	2 mA	(npw Hanpskenun aHoaa 750 B, HanpsbkeHnn grid 2 voltage 375 V, anode current 2,000 mA),
current [3]	375 mA	(npw Hanpskenun aHoaa 750 B, HanpsbkeHnn grid 2 voltage 375 V, anode current 2,000 mA),
current [4]	2000 mA	(npw Hanpskenun aHoaa 750 B, HanpsbkeHnn grid 2 voltage 375 V, anode current 2,000 mA),

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
grid [1]	3 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
grid [2]	10 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
grid [3]	-50 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
grid [4]	1 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
grid [5]	2000 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
grid [6]	2 V	abconoTHoe 3HadeHune, B L 10-50 Grid 1 cutoff voltage (at anode voltage 2,000 V., grid 2
resistance [1]	3 mA	HanpsxeHue 3anvMpaHusa Ha Nnepeon ceTke voltage 375V, anode current 20 mA, anode resistance
resistance [2]	375 mA	HanpsxeHue 3anvMpaHusa Ha Nnepeon ceTke voltage 375V, anode current 20 mA, anode resistance
resistance [3]	20 mA	HanpsxeHue 3anvMpaHusa Ha Nnepeon ceTke voltage 375V, anode current 20 mA, anode resistance
grid [1]	375 mA	BTUpon ceTku 375 B, Toke aHoga 20 MA, Zero anode current (at anode voitage 250 V, grid 2
grid [2]	20 mA	BTUpon ceTku 375 B, Toke aHoga 20 MA, Zero anode current (at anode voitage 250 V, grid 2
grid [3]	250 mA	BTUpon ceTku 375 B, Toke aHoga 20 MA, Zero anode current (at anode voitage 250 V, grid 2
grid [4]	2 mA	BTUpon ceTku 375 B, Toke aHoga 20 MA, Zero anode current (at anode voitage 250 V, grid 2
voltage [1]	5 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6
voltage [2]	375 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage [3]	1 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6
voltage [4]	0 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6
voltage [5]	3.5 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6
voltage [6]	-6 V	conpoTusnerHun B yenu aHoga 0,5 kOm), voltage 375 V, grid 1 voltage 0), A 3.5-6
anode voitage [1]	150 A	.. 150 Grid 1 reverse current (at anode voitage 1,000 V,
anode voitage [2]	1 A	.. 150 Grid 1 reverse current (at anode voitage 1,000 V,
anode voitage [3]	1000 A	.. 150 Grid 1 reverse current (at anode voitage 1,000 V,
current [1]	250 mA	Hyneso#n Tok aHoga (npw Hanpsi>xeHun aHoaa 250 B, grid 2 voltage 375 V, anode current 2,000 mA),
current [2]	2 mA	Hyneso#n Tok aHoga (npw Hanpsi>xeHun aHoaa 250 B, grid 2 voltage 375 V, anode current 2,000 mA),
current [3]	375 mA	Hyneso#n Tok aHoga (npw Hanpsi>xeHun aHoaa 250 B, grid 2 voltage 375 V, anode current 2,000 mA),
current [4]	2000 mA	Hyneso#n Tok aHoga (npw Hanpsi>xeHun aHoaa 250 B, grid 2 voltage 375 V, anode current 2,000 mA),
voltage [1]	35 A	nepon ceTkKMOB), A 3,5-6 Grid 2 current (at anode voltage 750 V,
voltage [2]	-6 A	nepon ceTkKMOB), A 3,5-6 Grid 2 current (at anode voltage 750 V,
voltage [3]	2 A	nepon ceTkKMOB), A 3,5-6 Grid 2 current (at anode voltage 750 V,
voltage [4]	750 A	nepon ceTkKMOB), A 3,5-6 Grid 2 current (at anode voltage 750 V,
current [1]	2 A	O6paTHbIA TOK NepBO#A CETKU (NPYU HANPSXKEHUM grid 2 voltage 375 V, anode current

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
current [2]	375 A	O6paTHbIA TOK NepBO#A CETKU (NPYU HANPSXKEHUM grid 2 voltage 375 V, anode current
anode voitage [1]	2000 uS	TOke aHoga 2000 mA), MKA, He 6onee 80 Mutual conductance (at anode voitage 750 V,
anode voitage [2]	6 uS	TOke aHoga 2000 mA), MKA, He 6onee 80 Mutual conductance (at anode voitage 750 V,
anode voitage [3]	80 uS	TOke aHoga 2000 mA), MKA, He 6onee 80 Mutual conductance (at anode voitage 750 V,
anode voitage [4]	750 uS	TOke aHoga 2000 mA), MKA, He 6onee 80 Mutual conductance (at anode voitage 750 V,
current [1]	750 A	Tok BTOpO# ceTku (Npu Hanpsxenuun aHoga 750 B, grid 2 voltage 375 V, anode current
current [2]	2 A	Tok BTOpO# ceTku (Npu Hanpsxenuun aHoga 750 B, grid 2 voltage 375 V, anode current
current [3]	375 A	Tok BTOpO# ceTku (Npu Hanpsxenuun aHoga 750 B, grid 2 voltage 375 V, anode current
power under conditions of class AB; at [1]	2000 W	2000 MA), MA ... —25-+60 Output power under conditions of class AB; at
power under conditions of class AB; at [2]	-25 W	2000 MA), MA ... —25-+60 Output power under conditions of class AB; at
power under conditions of class AB; at [3]	60 W	2000 MA), MA ... —25-+60 Output power under conditions of class AB; at
anode voitage [1]	0.1	KpyTuaHa xapakTepvcTUKN (Npy Hanps>xeHun aHoaa frequencies 0.1-1 MHz (at anode voitage 2,000 V,
anode voitage [2]	-1	KpyTuaHa xapakTepvcTUKN (Npy Hanps>xeHun aHoaa frequencies 0.1-1 MHz (at anode voitage 2,000 V,
anode voitage [3]	2000	KpyTuaHa xapakTepvcTUKN (Npy Hanps>xeHun aHoaa frequencies 0.1-1 MHz (at anode voitage 2,000 V,
current at least [1]	750 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA
current at least [2]	375 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
current at least [3]	2 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA
current at least [4]	375 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA
current at least [5]	2 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA
current at least [6]	80 mA	750 B, HanpsixeHun BTopon ceTku 375 B, Toke aHoaa grid 2 voltage 375 V, grid 2 current at least 80 mA
grid [1]	1 MHz	B pexume knacca AB; HavacTtoTe 0,1-1 My frequency 250 MHz (at anode voltage 2,000 V, grid 2
grid [2]	-1 MHz	B pexume knacca AB; HavacTtoTe 0,1-1 My frequency 250 MHz (at anode voltage 2,000 V, grid 2
grid [3]	250 MHz	B pexume knacca AB; HavacTtoTe 0,1-1 My frequency 250 MHz (at anode voltage 2,000 V, grid 2
grid [4]	2000 MHz	B pexume knacca AB; HavacTtoTe 0,1-1 My frequency 250 MHz (at anode voltage 2,000 V, grid 2
grid [5]	2 MHz	B pexume knacca AB; HavacTtoTe 0,1-1 My frequency 250 MHz (at anode voltage 2,000 V, grid 2
current [1]	2000 mA	(npv HanpsxeHUn aHoaa 2000 B, HanpsixkeHwun voltage 375 V, anode current 1,500 mA, grid 2 current
current [2]	375 mA	(npv HanpsxeHUn aHoaa 2000 B, HanpsixkeHwun voltage 375 V, anode current 1,500 mA, grid 2 current
current [3]	1500 mA	(npv HanpsxeHUn aHoaa 2000 B, HanpsixkeHwun voltage 375 V, anode current 1,500 mA, grid 2 current
current [4]	2 mA	(npv HanpsxeHUn aHoaa 2000 B, HanpsixkeHwun voltage 375 V, anode current 1,500 mA, grid 2 current
current at most [1]	375 mA	BTOpOW ceTkM 375 B, TOKE BTOPOW CETKU (a6CONI0THOE atleast 60 mA, grid 1 current at most 4 mA),

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
current at most [2]	60 mA	BTOpOW ceTkM 375 B, TOKE BTOPOW CETKU (a6CONI0THOE atleast 60 mA, grid 1 current at most 4 mA),
current at most [3]	1 mA	BTOpOW ceTkM 375 B, TOKE BTOPOW CETKU (a6CONI0THOE atleast 60 mA, grid 1 current at most 4 mA),
current at most [4]	4 mA	BTOpOW ceTkM 375 B, TOKE BTOPOW CETKU (a6CONI0THOE atleast 60 mA, grid 1 current at most 4 mA),
input [1]	250	250 Mly (npu HanpsbkeHun aHoga input ... 90-115
input [2]	90	250 Mly (npu HanpsbkeHun aHoga input ... 90-115
input [3]	-115	250 Mly (npu HanpsbkeHun aHoga input ... 90-115
output [1]	2000	2000 B, Hanps»xeHnn BTOpon ceTkn 375 B, output 18-23
output [2]	375	2000 B, Hanps»xeHnn BTOpon ceTkn 375 B, output 18-23
output [3]	18	2000 B, Hanps»xeHnn BTOpon ceTkn 375 B, output 18-23
output [4]	-23	2000 B, Hanps»xeHnn BTOpon ceTkn 375 B, output 18-23
voltage (ACorDC),V [1]	256 V	 25,6-28,4 Heater voltage (ACorDC),V 25.6-28.4
voltage (ACorDC),V [2]	-284 V	 25,6-28,4 Heater voltage (ACorDC),V 25.6-28.4
voltage (ACorDC),V [3]	25.6 V	 25,6-28,4 Heater voltage (ACorDC),V 25.6-28.4
voltage (ACorDC),V [4]	-28.4 V	 25,6-28,4 Heater voltage (ACorDC),V 25.6-28.4
voltage (DC), absolute	1 V	HanpsxeHune nepBon CETKN OTpULaTeNbHOe Negative grid 1 voltage (DC), absolute
voltage (amplitude value), V [1]	3 V	BxogHoe HanpsikeHue (aMnnuTygHoe 3HaqveHue), B . 150 Input voltage (amplitude value), V. 150
voltage (amplitude value), V [2]	150 V	BxogHoe HanpsikeHue (aMnnuTygHoe 3HaqveHue), B . 150 Input voltage (amplitude value), V. 150

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage (amplitude value), V [3]	150 V	BxogHoe HanpsikeHue (aMnnuTygHoe 3HaqveHue), B . 150 Input voltage (amplitude value), V. 150