

ELECTRONIC TUBE REFERENCE

GI41

Voltage - Triode (single) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Russian metal-ceramic triode for RF generation and amplification, including pulse operation.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION1 Triode	
MAXIMUM PLATE VOLTAGE	2800 V
Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table.	

The GI-41 triode generates and amplifies RF oscillations in pulsed service. It has an indirectly heated oxide-coated cathode and metal-ceramic 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 of up to -\ w2	503 W	oscillations with a peak output power of up to -\ w2503 [
anode modulation, at frequencies up [	1.5	1.5 kW with anode modulation, at frequencies up [-
heater	4	Envelope: metal-ceramic. 4 cathode and heater;
heater	2	„g,L{, 2% - heater
temperature,®°C [1]	-60 C	Temnepatypa okpyxatouie# cpeas, °C —60—+125 Ambient temperature,®°C —60to +125
temperature,®°C [2]	125 C	Temnepatypa okpyxatouie# cpeas, °C —60—+125 Ambient temperature,®°C —60to +125
temperature,®°C [3]	-60 C	Temnepatypa okpyxatouie# cpeas, °C —60—+125 Ambient temperature,®°C —60to +125
temperature,®°C [4]	125 C	Temnepatypa okpyxatouie# cpeas, °C —60—+125 Ambient temperature,®°C —60to +125
voltage (ACorDC),V	63 V	HanpsxeHue Hakana (~ vnu =), B 6,3 Heater voltage (ACorDC),V
anode voitage	450 uS	KpyTuaHa xapakTepucTukiy (Npy Hanps>keHun Mutual conductance (at anode voitage 450 V,
current [1]	450 mA	aHopa 450 B, Toke aHopa B peak anode current 50 mA), mA/V, atleast
current [2]	50 mA	aHopa 450 B, Toke aHopa B peak anode current 50 mA), mA/V, atleast
current, uA,atmost	50 uA	umnynece 50 MA), MA/B, He meHee Inverse grid current, uA,atmost

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage [1]	15 W	O6paTHblii TOK CETKMW, MKA, He Gonee 1,5 Peak power output (at peak anode voltage 2.5 A,
voltage [2]	2.5 W	O6paTHblii TOK CETKMW, MKA, He Gonee 1,5 Peak power output (at peak anode voltage 2.5 A,
pulse duration [1]	1.5 us	MouiHocTb BbiXogHas B uMmnysisce (Npu pulse duration 1.5 us, 1/duty factor 200,
pulse duration [2]	1 us	MouiHocTb BbiXogHas B uMmnysisce (Npu pulse duration 1.5 us, 1/duty factor 200,
pulse duration [3]	200 us	MouiHocTb BbiXogHas B uMmnysisce (Npu pulse duration 1.5 us, 1/duty factor 200,
wavelength [1]	8 cm	HanpsXXeHun aHoga 8 umnynece 2,5 A, wavelength 10 cm), kW, atleast
wavelength [2]	25 cm	HanpsXXeHun aHoga 8 umnynece 2,5 A, wavelength 10 cm), kW, atleast
wavelength [3]	10 cm	HanpsXXeHun aHoga 8 umnynece 2,5 A, wavelength 10 cm), kW, atleast
Interelectrode capacitance, pF	15 pF	AnuTenbHOCTU UMnynseca 1,5 Mxc, Interelectrode capacitance, pF:
input [1]	200	ckBaxkHOCTU 200, AnnHe 8oNHLI 10 cM), input
input [2]	8	ckBaxkHOCTU 200, AnnHe 8oNHLI 10 cM), input
input [3]	10	ckBaxkHOCTU 200, AnnHe 8oNHLI 10 cM), input
Dissipation, W	-250 W	HauMeHbLee -250 Dissipation, W:
current, A [1]	6 uA	Hawbonbwas MowHoOCTb BO36YXAeHUA, BT 350 Peak anode current, A
current, A [2]	350 uA	Hawbonbwas MowHoOCTb BO36YXAeHUA, BT 350 Peak anode current, A
temperature, °C	26 C	aHoAa B uMnynkLce 2,6 Envelope temperature, °C
CeTKMN B UMNYNbCe	125 s	CeTKMN B UMNYNbCe 1,25 Warm up time, s
frequency, MHz	200 MHz	Haunbonbuan Temnepartya o6onouku, °C 200 Operating frequency, MHz
Haunbonbuwas paboyas yactota, My [1]	3000	Haunbonbuwas paboyas yactota, My 3000 Minimum 1/duty factor

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Haunbonbuwas paboyas yactota, My [2]	1	Haunbonbuwas paboyas yactota, My 3000 Minimum 1/duty factor
HanpsbkeHve Hakana, B [1]	63	HanpsbkeHve Hakana, B 6,3 6,3 oscillator
HanpsbkeHve Hakana, B [2]	63	HanpsbkeHve Hakana, B 6,3 6,3 oscillator
voltage, V [1]	6.3 V	HanpsixxeHue aHoaa B Heater voltage, V 6.3 6.3
voltage, V [2]	6.3 V	HanpsixxeHue aHoaa B Heater voltage, V 6.3 6.3
voltage, kV [1]	28 kV	umnynece, kB o 2,8 2,8 Peak anode voltage, kV 2.8 2.8
voltage, kV [2]	28 kV	umnynece, kB o 2,8 2,8 Peak anode voltage, kV 2.8 2.8
voltage, kV [3]	2.8 kV	umnynece, kB o 2,8 2,8 Peak anode voltage, kV 2.8 2.8
voltage, kV [4]	2.8 kV	umnynece, kB o 2,8 2,8 Peak anode voltage, kV 2.8 2.8
current, A [1]	25 A	Tok aHoaa B uMnynece, A 25 2,5 Peak anode current, A 2.5 25
current, A [2]	25 A	Tok aHoaa B uMnynece, A 25 2,5 Peak anode current, A 2.5 25
current, A [3]	2.5 A	Tok aHoaa B uMnynece, A 25 2,5 Peak anode current, A 2.5 25
current, A [4]	25 A	Tok aHoaa B uMnynece, A 25 2,5 Peak anode current, A 2.5 25
Pulse duration, us [1]	1.5 us	[OnutenbHOCTL UMNYNbCA, Pulse duration, us 1.5 1.5
Pulse duration, us [2]	1.5 us	[OnutenbHOCTL UMNYNbCA, Pulse duration, us 1.5 1.5
power, W [1]	200 W	CKB@KHOCTE 200 200 Peak output power, W 1,500 1,500
power, W [2]	200 W	CKB@KHOCTE 200 200 Peak output power, W 1,500 1,500
power, W [3]	1500 W	CKB@KHOCTE 200 200 Peak output power, W 1,500 1,500
power, W [4]	1500 W	CKB@KHOCTE 200 200 Peak output power, W 1,500 1,500
power, W	350 W	MouwHocTb, BT: Peak drive power, W - 350

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Frequency, MHz [1]	1500 MHz	BbIXOAHAA B MMNyfbce . . . 1500 1500 Frequency, MHz 3,000 3,000
Frequency, MHz [2]	1500 MHz	BbIXOAHAA B MMNyfbce . . . 1500 1500 Frequency, MHz 3,000 3,000
Frequency, MHz [3]	3000 MHz	BbIXOAHAA B MMNyfbce . . . 1500 1500 Frequency, MHz 3,000 3,000
Frequency, MHz [4]	3000 MHz	BbIXOAHAA B MMNyfbce . . . 1500 1500 Frequency, MHz 3,000 3,000
frequency [1]	0 Hz	pdpvd U 0 Ui=6.3V; r: 'dues_ ; pulse frequency 1,000 Hz;
frequency [2]	6.3 Hz	pdpvd U 0 Ui=6.3V; r: 'dues_ ; pulse frequency 1,000 Hz;
frequency [3]	1000 Hz	pdpvd U 0 Ui=6.3V; r: 'dues_ ; pulse frequency 1,000 Hz;
grid	5	5 / LA L r A _ anod&,grid
frequency [1]	63 Hz	I A UB=63V;1 = '1) dus; p_:lse frequency 1,000 Hz;
frequency [2]	1 Hz	I A UB=63V;1 = '1) dus; p_:lse frequency 1,000 Hz;
frequency [3]	1 Hz	I A UB=63V;1 = '1) dus; p_:lse frequency 1,000 Hz;
frequency [4]	1000 Hz	I A UB=63V;1 = '1) dus; p_:lse frequency 1,000 Hz;
Output [1]	11	Y 11/ L :, <d ' ; ged Characteristic Curves Showing Oscillator Output 4
Output [2]	4	Y 11/ L :, <d ' ; ged Characteristic Curves Showing Oscillator Output 4
Gain coefficient (). TM [1]	200	R AN - Gain coefficient (). TM 00200 00 40Pinim. W
Gain coefficient (). TM [2]	0	R AN - Gain coefficient (). TM 00200 00 40Pinim. W
Gain coefficient (). TM [3]	40	R AN - Gain coefficient (). TM 00200 00 40Pinim. W
Amplification Mode	4	J0 Averaged Characteristic Curves in Amplification Mode: 4
power Py, "	3 W	peak oscillator power Py, "3%