

ELECTRONIC TUBE REFERENCE

GMI16R

Power - Beam (NOT sweep) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
BEAMPOWER

Russian beam-power tetrode designed for pulse amplifiers and modulators in radio-frequency equipment.

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 Beam Power
No fixed ratings recorded. Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table.

The GMI-16R beam-power tetrode is used in pulse amplifiers and modulators in RF equipment.

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 · Beam Power

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
POWER TETRODE	16 W	rMU-16P BEAM-POWER TETRODE
pulse	16 W	The TMU-16P beam-power tetrode is used in pulse
Cathode: indirectly heated, oxide-coated. ϕ [1]	4	Cathode: indirectly heated, oxide-coated. $\phi 4\acute{e}_3$ i
Cathode: indirectly heated, oxide-coated. ϕ [2]	3	Cathode: indirectly heated, oxide-coated. $\phi 4\acute{e}_3$ i
grid [1]	1	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [2]	5	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [3]	2	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [4]	7	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [5]	3	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [6]	2	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [7]	4	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [8]	3	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [9]	6	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A
grid [10]	1	1, 5~ no connection; 2, 7 - heater; 3 — grid 2; 4 — cathode, grid 3; 6 —grid 1; A

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
temperature, °C [1]	-60 °C	OguHo4HbIe YAAaPHbBIC HArpy3Ku Ambient temperature, °C —60to +125
temperature, °C [2]	125 °C	OguHo4HbIe YAAaPHbBIC HArpy3Ku Ambient temperature, °C —60to +125
voltage (ACorDC), V [1]	63 V	HanpsixkeHue Hakana (~uwnmu=), B 6,3 Heater voltage (ACorDC), V 6.3
voltage (ACorDC), V [2]	6.3 V	HanpsixkeHue Hakana (~uwnmu=), B 6,3 Heater voltage (ACorDC), V 6.3
voltage (DC), kV [1]	1 kV	Hanpsixenve aHoga noctosHHoe, KB 1 Anode voltage (DC), kV 1
voltage (DC), kV [2]	1 kV	Hanpsixenve aHoga noctosHHoe, KB 1 Anode voltage (DC), kV 1
voltage (DC), V [1]	2 V	Hanps>xeHve cetku, B: Grid 2voltage (DC), V , 600
voltage (DC), V [2]	600 V	Hanps>xeHve cetku, B: Grid 2voltage (DC), V , 600
voltage (DC), V [1]	600 V	BTOPOA MOCTOAHHO® o i nnnn.n 600 Grid 1voltage (DC), V
voltage (DC), V [2]	1 V	BTOPOA MOCTOAHHO® o i nnnn.n 600 Grid 1voltage (DC), V
voltage, V [1]	1 V	Peak grid 1 excess voltage, V 55
voltage, V [2]	55 V	Peak grid 1 excess voltage, V 55
voltage, V [1]	1 V	Negative grid 1 cutoff voltage, V... 60-95
voltage, V [2]	60 V	Negative grid 1 cutoff voltage, V... 60-95
voltage, V [3]	-95 V	Negative grid 1 cutoff voltage, V... 60-95
frequency, Hz [1]	3 Hz	Hanpsi>xeHue 3anupaHusa CeTKu nepeown, Pulse frequency, Hz 666
frequency, Hz [2]	666 Hz	Hanpsi>xeHue 3anupaHusa CeTKu nepeown, Pulse frequency, Hz 666
Interelectrode capacitance, pF [1]	60 pF	... L 60-95 Interelectrode capacitance, pF:
Interelectrode capacitance, pF [2]	-95 pF	... L 60-95 Interelectrode capacitance, pF:
input [1]	6	BpemsirotoBHOCTW, C, He 6onee 14 input 30-42

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
input [2]	14	Bpemsi rotoBHOCTW, C, He 6onee 14 input 30-42
input [3]	30	Bpemsi rotoBHOCTW, C, He 6onee 14 input 30-42
input [4]	-42	Bpemsi rotoBHOCTW, C, He 6onee 14 input 30-42
output [1]	3	LnMTenbHOCTb UMNYNBCA, MKC oo v v i e el 3 output 5-8
output [2]	5	LnMTenbHOCTb UMNYNBCA, MKC oo v v i e el 3 output 5-8
output [3]	-8	LnMTenbHOCTb UMNYNBCA, MKC oo v v i e el 3 output 5-8
voltage (ACorDC),V [1]	57 V	Hanpsbkenune Hakana (~uvwnn =),B 5,7-7 Heater voltage (ACorDC),V 5.7-7
voltage (ACorDC),V [2]	-7 V	Hanpsbkenune Hakana (~uvwnn =),B 5,7-7 Heater voltage (ACorDC),V 5.7-7
voltage (ACorDC),V [3]	5.7 V	Hanpsbkenune Hakana (~uvwnn =),B 5,7-7 Heater voltage (ACorDC),V 5.7-7
voltage (ACorDC),V [4]	-7 V	Hanpsbkenune Hakana (~uvwnn =),B 5,7-7 Heater voltage (ACorDC),V 5.7-7
voltage, V	8 V	Havbonbluee Hanps>xeHve hopcupoBaH- Maximum speed-up heater voltage, V. 8
voltage (DC), kV [1]	8 kV	HOrOHakana, B 8 Anode voltage (DC), kV 4
voltage (DC), kV [2]	4 kV	HOrOHakana, B 8 Anode voltage (DC), kV 4
voltage, V [1]	4 V	TOSHHE, KB 4 Peak grid 1 excess voltage, V. 100
voltage, V [2]	1 V	TOSHHE, KB 4 Peak grid 1 excess voltage, V. 100
voltage, V [3]	100 V	TOSHHE, KB 4 Peak grid 1 excess voltage, V. 100
Dissipation, W	9 W	poR, MOCTORHHE, KB 0,9 Dissipation, W:
anode	9	Haunbonblwee HanpsHkeHue ceTku anode 9
grid [1]	1	Hanbonblwee HanpsKeHue CeTKU grid 1 .o 1

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
grid [2]	1	Hanbonbliee HanpsKeHUe CeTKU grid 1 .o 1
pulse duration, us	10 us	PaccenBaemasn HanbonbLLasA MOLWHOCTb, BT: Maximum pulse duration, us 10
temperature, °C [1]	9 C	AHOAOM ..o vititat et 9 Bulb temperature, °C 250
temperature, °C [2]	250 C	AHOAOM ..o vititat et 9 Bulb temperature, °C 250
heater, V [1]	18 V	CETKOM BTOPOM . . o e oottt i i e ns 1,8 Voltage between cathode and heater, V.. —20to +100
heater, V [2]	-20 V	CETKOM BTOPOM . . o e oottt i i e ns 1,8 Voltage between cathode and heater, V.. —20to +100
heater, V [3]	100 V	CETKOM BTOPOM . . o e oottt i i e ns 1,8 Voltage between cathode and heater, V.. —20to +100
frequency [1]	666 Hz	pulse frequency 666 Hz; _1 IR
frequency [2]	1 Hz	pulse frequency 666 Hz; _1 IR
current; —j: +	4 A	— — - — grid1 current; —j: +4 b bt fe e
current F4— ek S G S P S	2 A	L . grid 2 current F4— ek S G S P S
frequency [1]	71044 Hz	71044 == = — pulse frequency 666 Hz; 7
frequency [2]	666 Hz	71044 == = — pulse frequency 666 Hz; 7
frequency [3]	7 Hz	71044 == = — pulse frequency 666 Hz; 7
current	1 A	il =1 g - —. . anode current;
current [1]	1 A	]] 1 - — _ _ _ grid 1 current;
current [2]	1 A	]] 1 - — _ _ _ grid 1 current;
current	2 A	- grid 2 current
Voltage versus	1 V	Showing Grid 1 Cutoff Voltage versus
Voltage versus [1]	0 V	0 gt:svgw% I(t;aride 1 Cutoff Voltage versus 0
Voltage versus [2]	1 V	0 gt:svgw% I(t;aride 1 Cutoff Voltage versus 0
Voltage versus [3]	0 V	0 gt:svgw% I(t;aride 1 Cutoff Voltage versus 0