

ELECTRONIC TUBE REFERENCE

GMI10

Specialized - Switching Tube electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION
CONSTRUCTION
TETRODE

Russian high-power tetrode designed for pulse-modulator or pulse-power switching service in RF equipment, controlling high-voltage, high-current pulses rather than continuous linear amplification.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	6.3 V / 12 A	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 Tetrode	
MAXIMUM PLATE VOLTAGE	9000 V
MAXIMUM CATHODE CURRENT	13 A
Promoted-field audit performed from English ratings/characteristics; detailed electrical values retained in parameter table.	

The GMI-10 tetrode is used as a pulse power switch in pulse 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 · Tetrode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
power [1]	10 W	The MMWU-10 tetrode is used as a pulse power 9 SN
power [2]	9 W	The MMWU-10 tetrode is used as a pulse power 9 SN
pulse modulators in RF equipment. L > "	27	switch in pulse modulators in RF equipment. L > " 27 g
anode [1]	67	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [2]	1	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [3]	4	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [4]	8	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [5]	6	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [6]	2	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [7]	5	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [8]	9	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
anode [9]	1	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [10]	3	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [11]	7	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [12]	10	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
anode [13]	2	Diameter: at most 67 mm. 1, 4, 8 — cathode and heater; 6 — heater; 2, 5, 9 - grid 1; 3, 7, 10 - grid 2; A - anode
temperature, °C, atleast. ~	60 C	Temnepatypa okpyxatouien cpegpt, °C, Ambient temperature, °C, atleast. ~60
current, A, atleast [1]	13 A	.. 13 Peak anode current, A, atleast 13
current, A, atleast [2]	13 A	.. 13 Peak anode current, A, atleast 13
current, A,atmost [1]	6 A	ToK BTOpOW CeTku B UMNynbee, A, He 6onee 2 Peak grid 2 current, A,atmost 2
current, A,atmost [2]	2 A	ToK BTOpOW CeTku B UMNynbee, A, He 6onee 2 Peak grid 2 current, A,atmost 2
current, A,atmost [3]	2 A	ToK BTOpOW CeTku B UMNynbee, A, He 6onee 2 Peak grid 2 current, A,atmost 2
current, A,atmost [4]	2 A	ToK BTOpOW CeTku B UMNynbee, A, He 6onee 2 Peak grid 2 current, A,atmost 2
current, A,atmost [1]	6 A	Tok nepBon ceTkm B uMmnynece, A, He 6onee 2 Peak grid 1 current, A,atmost 2
current, A,atmost [2]	2 A	Tok nepBon ceTkm B uMmnynece, A, He 6onee 2 Peak grid 1 current, A,atmost 2
current, A,atmost [3]	1 A	Tok nepBon ceTkm B uMmnynece, A, He 6onee 2 Peak grid 1 current, A,atmost 2

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
current, A,atmost [4]	2 A	Tok nepBon ceTkm B uMmnynece, A, He 6onee 2 Peak grid 1 current, A,atmost 2
voltage, V,atmost [1]	6 V	HanpsixxeHnve sanupanus, B, He 6onee 650 Cutoff voltage, V,atmost 650
voltage, V,atmost [2]	650 V	HanpsixxeHnve sanupanus, B, He 6onee 650 Cutoff voltage, V,atmost 650
voltage, V,atmost [3]	650 V	HanpsixxeHnve sanupanus, B, He 6onee 650 Cutoff voltage, V,atmost 650
iNput [1]	20	BXOAHAA . .ottt i e e 20-60 iNput ... 20-60
iNput [2]	-60	BXOAHAA . .ottt i e e 20-60 iNput ... 20-60
iNput [3]	20	BXOAHAA . .ottt i e e 20-60 iNput ... 20-60
iNput [4]	-60	BXOAHAA . .ottt i e e 20-60 iNput ... 20-60
output [1]	4	BBIXOOAHAA . .ottt et 4-8 output 4-8
output [2]	-8	BBIXOOAHAA . .ottt et 4-8 output 4-8
output [3]	4	BBIXOOAHAA . .ottt et 4-8 output 4-8
output [4]	-8	BBIXOOAHAA . .ottt et 4-8 output 4-8
voltage, V [1]	57 V	HanpsbkeHne Hakana, B 5,7-6,9 Heater voltage, V 5.7-6.9
voltage, V [2]	-69 V	HanpsbkeHne Hakana, B 5,7-6,9 Heater voltage, V 5.7-6.9
voltage, V [3]	5.7 V	HanpsbkeHne Hakana, B 5,7-6,9 Heater voltage, V 5.7-6.9
voltage, V [4]	-6.9 V	HanpsbkeHne Hakana, B 5,7-6,9 Heater voltage, V 5.7-6.9
voltage, kV [1]	9 kV	Hanpskenne aHopa, kB ol 9 Anode voltage, kV 9
voltage, kV [2]	9 kV	Hanpskenne aHopa, kB ol 9 Anode voltage, kV 9
current, A [1]	20 A	Tok KaToga B UMMynbce, A, 20 Peak cathode current, A 20
current, A [2]	20 A	Tok KaToga B UMMynbce, A, 20 Peak cathode current, A 20
anode [1]	4	AHOAOM . .ottt et e 4 anode 41
anode [2]	41	AHOAOM . .ottt et e 4 anode 41
grid [1]	4	BTOPOM CETKOM ovvit i 4 grid 2 ... 4
grid [2]	2	BTOPOM CETKOM ovvit i 4 grid 2 ... 4

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
grid [3]	4	BTOPOM CETKOM ovvit i 4 grid 2 ... 4
Pulse duration, us	10 us	OnnuTensHOCTE UMNYNBCA, MKC oo v e e e 10 Pulse duration, us
temperature, °C [1]	250 C	Temnepatypa o6onouku, °C 250 Envelope temperature, °C 250
temperature, °C [2]	250 C	Temnepatypa o6onouku, °C 250 Envelope temperature, °C 250
anode	125	P 125 T__ grid2-anode
Anode Characteristic Curves [1]	0	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [2]	5	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [3]	10	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [4]	15	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [5]	20	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [6]	25	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [7]	30	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [8]	35	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves:
Anode Characteristic Curves [9]	40	0 05 10 15 20 25 30 35 40 AveragedPeak Grid-Anode Characteristic Curves: