



ELECTRONIC TUBE REFERENCE

GU68P

Power - Triode (over 1000V 100W) electronic tube

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Evaporation-cooled metal-ceramic power triode for stationary RF transmitter amplifiers to approximately 30 MHz. It combines about 130 kW plate dissipation with 12 kV plate capability and a carbonized thoriated-tungsten cathode.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	20 V / —	PARALLEL HEATER	— / —
HEATING	Direct	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	12000 V
MAXIMUM PLATE DISSIPATION	130000 W
MAXIMUM GRID DISSIPATION	2300 W
<i>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.</i>	

The GU-68P triode is used as a power amplifier at frequencies up to 30 MHz in stationary RF transmitters. It has a directly heated carbonized thoriated-tungsten cathode and evaporative anode 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 · Triode

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
power amplifier at fre [1]	68 W	leHepaTopHbI Tpuog MNY-68M npegHasHayeH gns The I'Y-68I1 triode is used as a power amplifier at fre-
power amplifier at fre [2]	68 W	leHepaTopHbI Tpuog MNY-68M npegHasHayeH gns The I'Y-68I1 triode is used as a power amplifier at fre-
temperature, °C [1]	-10 C	Ambient temperature, °C —10to +55
temperature, °C [2]	55 C	Ambient temperature, °C —10to +55
voltage	1 uS	KpyTusHa xapakTepucTiki (MpyU HanpspKeHun Mutual conductance (at anode voltage 1 kV,
currents [1]	1 A	aHopa 1 kB, Tokax aHoga 10 u anode currents 10 and
currents [2]	10 A	aHopa 1 kB, Tokax aHoga 10 u anode currents 10 and
currents [3]	10 A	aHopa 1 kB, Tokax aHoga 10 u anode currents 10 and
voltages [1]	1 kV	KoadduumeHT yeuneHums (Npu Hanps>kKeHnsx Gain coefficient (at anode voltages 1 and 2kV,
voltages [2]	2 kV	KoadduumeHT yeuneHums (Npu Hanps>kKeHnsx Gain coefficient (at anode voltages 1 and 2kV,
grid [1]	10 mA	aHoma 10 A) ... 30-38 Anode current (at anode voltage 0.3 kV, grid
grid [2]	30 mA	aHoma 10 A) ... 30-38 Anode current (at anode voltage 0.3 kV, grid
grid [3]	-38 mA	aHoma 10 A) ... 30-38 Anode current (at anode voltage 0.3 kV, grid

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
grid [4]	0.3 mA	aHoma 10 A) ... 30-38 Anode current (at anode voltage 0.3 kV, grid
voltage [1]	3 V	Tok aHoAa (Npu HanpsXeHusix aHoga 0,3 kB, voltage 100 V), A, atleast 8
voltage [2]	100 V	Tok aHoAa (Npu HanpsXeHusix aHoga 0,3 kB, voltage 100 V), A, atleast 8
voltage [3]	8 V	Tok aHoAa (Npu HanpsXeHusix aHoga 0,3 kB, voltage 100 V), A, atleast 8
anode [1]	100 V	ceTkn 100B), A, HemeHee 8 Negative cutoff voltage (at anode
anode [2]	8 V	ceTkn 100B), A, HemeHee 8 Negative cutoff voltage (at anode
current [1]	3 A	HanpsixxeHue 3anMpaHus oTpulaTensHoe, voltage 10kV, anode current 0.1 A), absolute
current [2]	10 A	HanpsixxeHue 3anMpaHus oTpulaTensHoe, voltage 10kV, anode current 0.1 A), absolute
current [3]	100 mA	HanpsixxeHue 3anMpaHus oTpulaTensHoe, voltage 10kV, anode current 0.1 A), absolute
Interelectrode capacitance, pF [1]	3 pF	abcontoTHoe 3HayeHwe, B,He bonee 400 Interelectrode capacitance, pF:
Interelectrode capacitance, pF [2]	400 pF	abcontoTHoe 3HayeHwe, B,He bonee 400 Interelectrode capacitance, pF:
input,atmost ol [1]	6	Me>xkanekTpogHbie emkocTu, Nnd, He 6onee: input,atmost ol 300
input,atmost ol [2]	300	Me>xkanekTpogHbie emkocTu, Nnd, He 6onee: input,atmost ol 300
output,atmost L [1]	300	BXOAHAS .. .vovitit i 300 output,atmost L 6
output,atmost L [2]	6	BXOAHAS .. .vovitit i 300 output,atmost L 6
voltage [1]	105 W	MPOXOAHAS . .t ot it i e e eni e 105 Output power (at 30 MHz, at filament voltage
voltage [2]	30 W	MPOXOAHAS . .t ot it i e e eni e 105 Output power (at 30 MHz, at filament voltage
voltage [1]	30 kV	MouwHocTb BbIXOgHas (Ha YacTtoTe 30 MMy npu 20 V and anode voltage 12kV), kW 250
voltage [2]	20 kV	MouwHocTb BbIXOgHas (Ha YacTtoTe 30 MMy npu 20 V and anode voltage 12kV), kW 250

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage [3]	12 kV	MouwHocTb BbIXOgHas (Ha YacTtoTe 30 MMy npu 20 V and anode voltage 12kV), kW 250
voltage [4]	250 kV	MouwHocTb BbIXOgHas (Ha YacTtoTe 30 MMy npu 20 V and anode voltage 12kV), kW 250
voltage (ACorDC),V [1]	19 V	Hanps>xeHue Hakana (nepemexHoe unu Filament voltage (ACorDC),V 19-21
voltage (ACorDC),V [2]	-21 V	Hanps>xeHue Hakana (nepemexHoe unu Filament voltage (ACorDC),V 19-21
voltage (DC), kV [1]	19 kV	noctosHHoe), B ol 19-21 Anode voltage (DC), kV 12
voltage (DC), kV [2]	-21 kV	noctosHHoe), B ol 19-21 Anode voltage (DC), kV 12
voltage (DC), kV [3]	12 kV	noctosHHoe), B ol 19-21 Anode voltage (DC), kV 12
voltage, absolute value, kV	1.5 kV	Hanpsetue, kB: Negative outoff voltage, absolute value, kV 1.5
current, A [1]	12 A	aHOAA (MOCTOAHHOE) ot i i i ns 12 Filament startingcurrent, A 450
current, A [2]	450 A	aHOAA (MOCTOAHHOE) ot i i i ns 12 Filament startingcurrent, A 450
Dissipation, kW	3 kW	3anupaHusi oTpulaTensHoe (abcontoTHoe Dissipation, kW:
anode [1]	15	BHAYEHME) . ..ot t t i e e 1,5 anode 130
anode [2]	130	BHAYEHME) . ..ot t t i e e 1,5 anode 130
grid [1]	450	MyckoBOW TOKHaKana, A 450 grid .. 2.3
grid [2]	2.3	MyckoBOW TOKHaKana, A 450 grid .. 2.3
frequency, MHz	30 MHz	PaccenBaemas MOWHOCTb, KBT: Operating frequency, MHz 30
Temperature at stem and metal-to-ceramic [1]	1 C	1T Y 130 Temperature at stem and metal-to-ceramic
Temperature at stem and metal-to-ceramic [2]	130 C	1T Y 130 Temperature at stem and metal-to-ceramic
grid	800	™ ~ - 800 - — - grid
Anode Characteristic Curves [1]	72	) ! 72 J 4 § & 7 8 § 1UakV Averaged Grid-Anode Characteristic Curves

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Anode Characteristic Curves [2]	4	) ! 72 J 4 § & 7 8 § 11UakV Averaged Grid-Anode Characteristic Curves
Anode Characteristic Curves [3]	7	) ! 72 J 4 § & 7 8 § 11UakV Averaged Grid-Anode Characteristic Curves
Anode Characteristic Curves [4]	8	) ! 72 J 4 § & 7 8 § 11UakV Averaged Grid-Anode Characteristic Curves
Anode Characteristic Curves [5]	1	) ! 72 J 4 § & 7 8 § 11UakV Averaged Grid-Anode Characteristic Curves

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