



ELECTRONIC TUBE REFERENCE

GI27AM

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

CONSOLIDATED TECHNICAL DATA

1 SECTION

CONSTRUCTION

TRIODE

Power transmitting triode intended for RF amplification, oscillation, or modulation. Manufacturer documentation emphasizes professional transmitter or industrial RF service with substantial plate voltage, current, and output capability.

GENERAL CHARACTERISTICS

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

SECTION RATINGS

SECTION 1 Triode	
MAXIMUM PLATE VOLTAGE	40000 V
MAXIMUM PLATE DISSIPATION	25000 W
MAXIMUM GRID DISSIPATION	250 W
Promoted-field completeness audit performed from English ratings/characteristics.	

The GI-27AM directly heated metal-ceramic triode is used in self-excited oscillator and RF power-amplifier circuits with pulsed anode modulation; its anode is water cooled and other envelope elements are air cooled.

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
UMnynbcHbI reHepaTopHbiv Tpuog, M'N [1]	27	UMnynbcHbI reHepaTopHbiv Tpuog, M'N-27AM npea- The "N-27AM triode is used in self-excited oscillator
UMnynbcHbI reHepaTopHbiv Tpuog, M'N [2]	27	UMnynbcHbI reHepaTopHbiv Tpuog, M'N-27AM npea- The "N-27AM triode is used in self-excited oscillator
temperature, °C [1]	147 C	YCKOPEHMEM, M/CZ i 147 Ambient temperature, °C 1-55
temperature, °C [2]	1 C	YCKOPEHMEM, M/CZ i 147 Ambient temperature, °C 1-55
temperature, °C [3]	-55 C	YCKOPEHMEM, M/CZ i 147 Ambient temperature, °C 1-55
voltage [1]	3 kV	HanpsixxeHue 3anupaHus oTpularensHoe (Npu Negative cutoff voltage (at anode voltage 10 kV,
voltage [2]	10 kV	HanpsixxeHue 3anupaHus oTpularensHoe (Npu Negative cutoff voltage (at anode voltage 10 kV,
current [1]	10 A	HanpsbkeHuy aHoaa 10 kB, Toke aHopa 0,1 A), anode current 0.1 A), absolute value,
current [2]	1 A	HanpsbkeHuy aHoaa 10 kB, Toke aHopa 0,1 A), anode current 0.1 A), absolute value,
current [3]	100 mA	HanpsbkeHuy aHoaa 10 kB, Toke aHopa 0,1 A), anode current 0.1 A), absolute value,
anode	3 kV	HanpsHKeHUsIX aHOAA N CETKU B UMNyTbCe grid voltages 3 kV, with interconnected anode
voltages	4 V	KoadhdpumeHT yecuneHus (npu HanpspkeHnsx aHopa Gain coefficient (at anode voltages 4 and

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
voltage	40 W	BbixogHas MOWHOCTb B My bce (Npn Peak power output (at peak anode voltage 40 kV,
pulse duration [1]	40 us	Hanpsi>XeHuv aHoaa B umnyrnsce 40 kB, pulse duration 300 us, at up to 150 MHz),
pulse duration [2]	300 us	Hanpsi>XeHuv aHoaa B umnyrnsce 40 kB, pulse duration 300 us, at up to 150 MHz),
pulse duration [3]	150 us	Hanpsi>XeHuv aHoaa B umnyrnsce 40 kB, pulse duration 300 us, at up to 150 MHz),
anode [1]	0 uS	0o 150 M), MBT, He meHee Mutual conductance (at anode voltage 5 kV, anode
anode [2]	150 uS	0o 150 M), MBT, He meHee Mutual conductance (at anode voltage 5 kV, anode
anode [3]	5 uS	0o 150 M), MBT, He meHee Mutual conductance (at anode voltage 5 kV, anode
Interelectrode capacitance, pF [1]	5 pF	aHopa 5 kB, Tokax aHoaa 2,51 4,5 A), Interelectrode capacitance, pF:
Interelectrode capacitance, pF [2]	251 pF	aHopa 5 kB, Tokax aHoaa 2,51 4,5 A), Interelectrode capacitance, pF:
Interelectrode capacitance, pF [3]	45 pF	aHopa 5 kB, Tokax aHoaa 2,51 4,5 A), Interelectrode capacitance, pF:
input,atmost [1]	75	75-110 input,atmost 200
input,atmost [2]	-110	75-110 input,atmost 200
input,atmost [3]	200	75-110 input,atmost 200
voltage (DC), kV	40 kV	Hanpsixenue aHoaa B UMNynsce Peak anode voltage (DC), kV 40
grid voltage, absolute value, V	4800	(noctosiHHoe), KB Negative grid voltage, absolute value, V 4,800
dissipation, kW L	25 kW	HanpsixeHue ceTku oTpuuaTtensHoe (abconoTHoe Anode dissipation, kW L. 25
current (peak value), A [1]	3 A	3Hauenue), B Filament starting current (peak value), A 1,100
current (peak value), A [2]	1100 A	3Hauenue), B Filament starting current (peak value), A 1,100
frequency, MHz, atmost [1]	1100 MHz	BHAYGHME), A . . . e 1100 Operating frequency, MHz, atmost 200

PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
frequency, MHz, atmost [2]	200 MHz	BHAYGHME), A . . . e 1100 Operating frequency, MHz, atmost 200
Temperature at the hottest point of envelope, °C [1]	250 C	PacceuBaemasi MOWHOCTb CETKOR, BT 250 Temperature at the hottest point of envelope, °C . . . 175
Temperature at the hottest point of envelope, °C [2]	175 C	PacceuBaemasi MOWHOCTb CETKOR, BT 250 Temperature at the hottest point of envelope, °C . . . 175
grid [1]	80	_ - grid . 80 P J 4
grid [2]	4	_ - grid . 80 P J 4