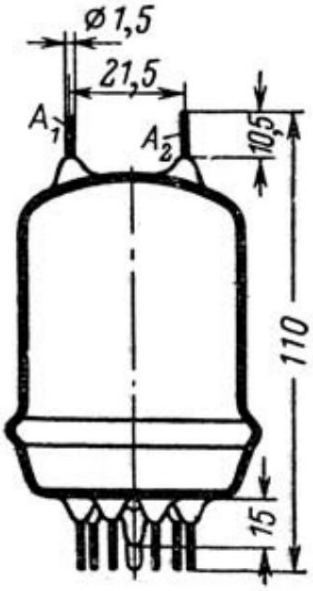
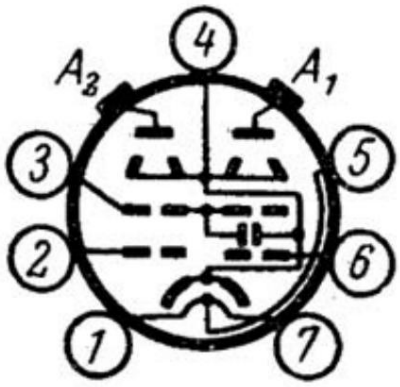
GU-29 - Double generator beam tetrode



The GU-29 tetrode is designed to amplify power and generating high frequency oscillations. Applied in transmitting devices

Pin assignment GU-29 1 Glow

2 First grid of tetrode #2 3 Second grids	
4 Cathodes and beam plates	
5 Filament (mid point) 6 Tetrode #1 first grid 7 Filament	
A1 Tetrode #1 anode A2 Tetrode #2 anode	



The cathode is indirectly heated oxide. Works in any position. Produced in glass design. Life time - not less than **500** hours. Conclusions of electrodes - pin. Pins - 7.

Interelectrode capacitances, **pF:**

• Input - **15.** • Output - 7. • Checkpoint - no more than **0.1.**

Rated electrical data

Parameter	*Value Tolerance*	
Glow voltage, V Glow current	6.3 or 12.6 2.25	
when heaters are connected in parallel, A Glow current when heaters are		0,25
connected in series, A	1,125	0,125
Anode voltage, V	400	
Voltage on the second grid, V Current in	225	
the anode circuit of each tetrode, mA * Current in	60	22
the second grid circuit, mA	10	
The steepness of the characteristics of each tetrode, mA/V	8	
Gain factor of each tetrode relative to the second grid Vibrational power, W **	9	
	45	

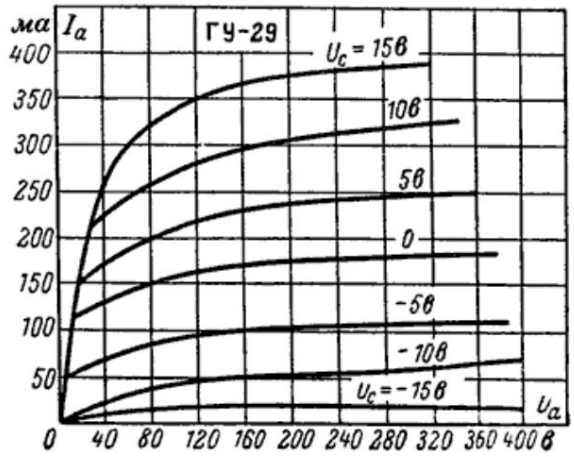
* Under the condition for the tested tetrode, the voltage at the anode should be **250** V, on the second grid **175** V, on the first grid **-11** V, on the first grid of the untested (second) tetrode **-100** V.

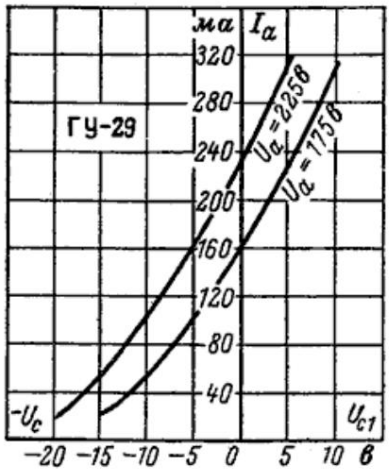
** In a push-pull circuit in self-excitation mode. The total current in the anode circuit is **250 mA,** the current in the second grid circuit is not more than **35 mA,** in the circuit of the first grids **10-15 mA,** the voltage on the second grid is **225** V, the resistance in the circuit of the first grids is **5-12 kOhm,** the oscillation frequency of the circuit is **200 MHz.**

Maximum allowable electrical values for the GU-29 lamp

The highest heating voltage with parallel connection of heaters, V	7
The lowest heating voltage with parallel connection of heaters, V	5,7
The highest glow voltage when heaters are connected in series, V The lowest glow voltage when heaters are	14
connected in series, V The highest voltage at the anode, V	11,4
	750
The highest voltage on the second grid, V	225
Maximum power continuously dissipated on the anodes, W Maximum power	40
continuously dissipated on the second grid, W Maximum direct voltage between the	7
cathode and heater, V Maximum operating frequency, MHz	100
	200
The highest operating temperature of the cylinder, ° ÿ	100
The highest leakage current between the cathode and the heater, ÿA	175

Anode characteristic of the GU-29 lamp Anode-grid characteristic of the GU-29 lamp





Operating modes of the GU-29 lamp for linear amplification of SSB signals

Gain class "AB1"____

• Anode voltage: **750 V** • Screen grid voltage: **225 V** • Control grid voltage: **-25 V** • Anode quiescent current: **20 mA** • Anode current (maximum signal): **132 mA** • Drive voltage amplitude: **25 V** • Drive power: **0 W** • Load resistance: **3400 Ohm** • Useful power: **68 W.**

Gain class "B" ___

• Anode voltage: **500 V** • Screen grid voltage: **225 V** • Control grid voltage: **-18 V** • Anode quiescent current: **27 mA** • Anode current (maximum signal): **230 mA** • Drive voltage amplitude: **28 V** • Drive power: **0 .4 W** • Load resistance: **1300 Ohm** • Useful power: **76 W.**