

# TETRODE

# GU-29

The GU-29 beam-power double tetrode is used as an oscillator and a power amplifier operating in the metric wavelength range in RF equipment.

### GENERAL

Cathode: indirectly heated, oxide-coated.  
 Envelope: glass, no-base.  
 Cooling: forced air.  
 Height: at most 110 mm.  
 Diameter: at most 61 mm.  
 Mass: at most 125g.

### OPERATING ENVIRONMENTAL CONDITIONS

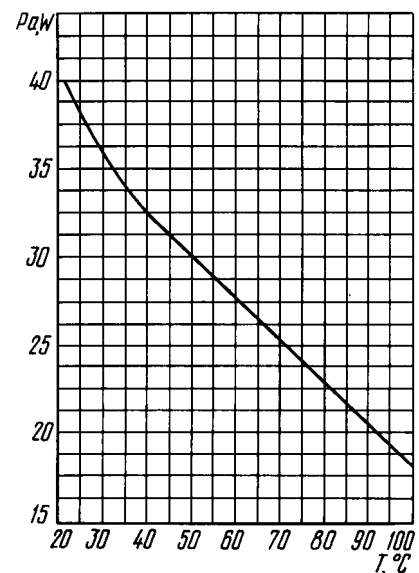
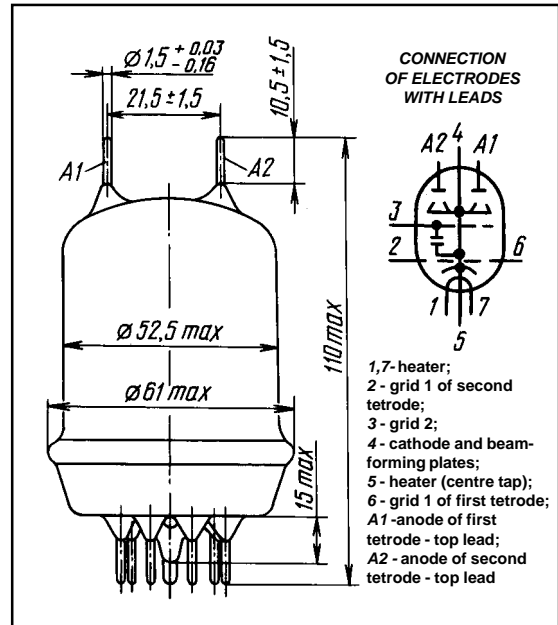
Ambient temperature, °C **-10 to +55**  
 Relative humidity at up to +25 °C, % **98**

### BASIC DATA Electrical Parameters

Heater voltage, V **12.6**  
 Heater current, A **1-1.3**  
 Anode current (at anode voltage 250 V, grid 1 voltage - 11 V of first tetrode, grid 1 voltage 100 V of second tetrode, grid 2 voltage 175 V), mA **38-85**  
 Interelectrode capacitance, pF:  
 input, at most **13-17**  
 output, at most **5-9**  
 transfer, at most **0.1**  
 Output power, W, min.:  
 at anode voltage 400 V, grid 2 voltage at most 225 V, operating frequency 100-200 MHz **42**  
 over 500 h of service **34**

### Limit Operating Values

Heater voltage, V:  
 with heaters connected in parallel **5.7-6.9**  
 with heaters connected in series **11.3-13.8**  
 Anode voltage, V **750**  
 Grid 2 voltage, V **225**  
 Dissipation, W:  
 anodes **40**  
 grid 2 **7**  
 grid 1 **1**  
 Envelope temperature, °C **175**



Characteristic Curve Showing Anode Dissipation versus Ambient Temperature (at bulb temperature  $T_b = 175^\circ\text{C}$ )