

# TETRODE

# GU-32

The GU-32 beam-power double tetrode is used as an oscillator and a RF power amplifier operating in the metric wavelength range in RF equipment.

### GENERAL

Cathode: indirectly heated, oxide-coated.  
 Envelope: glass, no-base.  
 Height: at most 88 mm.  
 Diameter: at most 52.5 mm.  
 Mass: at most 100 g.

### OPERATING ENVIRONMENTAL CONDITIONS

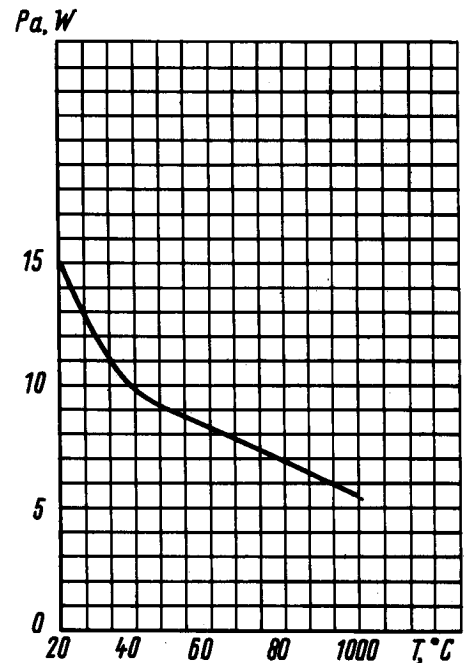
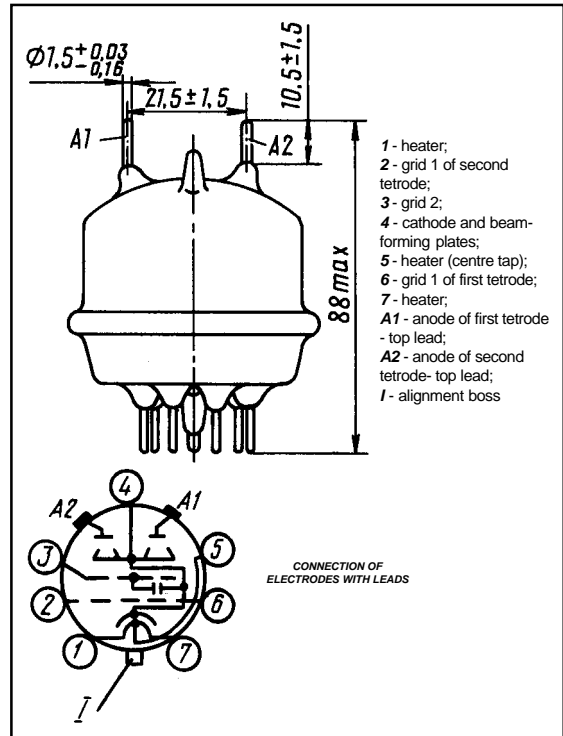
Vibration loads:  
 frequencies, Hz **1-200**  
 acceleration, m/s<sup>2</sup> **49**  
 Multiple impacts with acceleration, m/s<sup>2</sup> **147**  
 Ambient temperature, °C **-45 to +70**  
 Relative humidity at up to +25 °C % **98**

### BASIC DATA Electrical Parameters

Heater voltage, V **12.6**  
 Heater current, A **0.7-0.9**  
 Anode current (at anode voltage 250 V, grid 1 voltage 10 V of first tetrode, grid 1 voltage - 100 V of second tetrode, grid 2 voltage 135 V), mA **18-42**  
 Interelectrode capacitance, pF:  
 input **6.2-9.4**  
 output **2.8-4.8**  
 transfer, at most **0.05**  
 Output power, W, min.:  
 at anode voltage 400 V, grid 2 voltage at most 250 V, anode current 19 mA **14**  
 over 2000 h of service **11**

### Limit Operating Values

Heater voltage, V:  
 with heaters connected in parallel **5.7-6.9**  
 with heaters connected in series **11.4-13.8**  
 Anode voltage, V **500**  
 Grid 2 voltage, V **250**  
 Dissipation, W:  
 anode **15**  
 grid 2 **5**  
 Envelope temperature, °C **115**



Characteristic Curve Showing Anode Dissipation versus Ambient Temperature (at bulb temperature  $T_b = 115^\circ\text{C}$ )