

TETRODE

GU-34B-1

The GU-34B-1 tetrode is used for wideband power amplification at frequencies up to 250 MHz in RF equipment.

GENERAL

Cathode: indirectly heated, oxide-coated.
Envelope: glass-to-metal.
Cooling: forced air.
Height: at most 126 mm.
Diameter: at most 94 mm.
Mass: at most 1 kg.

OPERATING ENVIRONMENTAL CONDITIONS

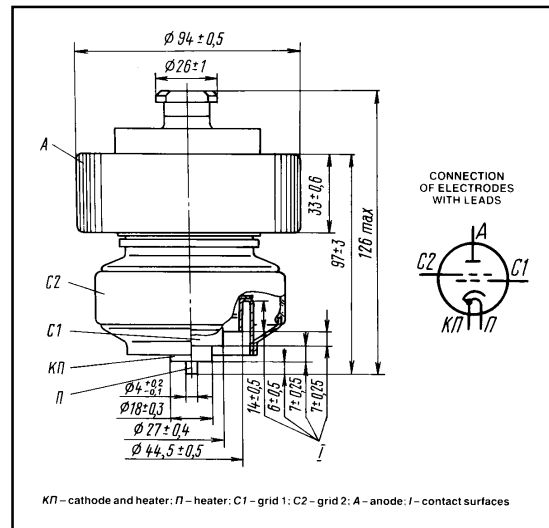
Ambient temperature, °C **-10 to +55**
Relative humidity at up to +25 °C, % **98**

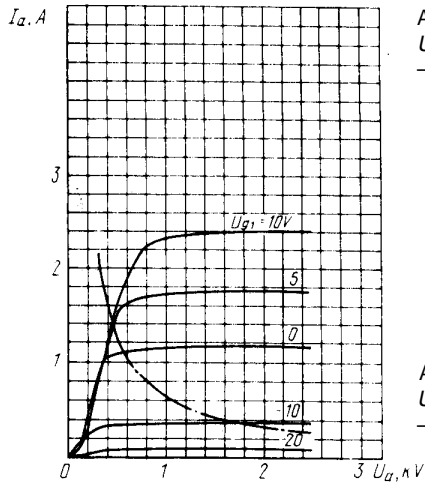
BASIC DATA Electrical Parameters

Heater voltage, V **126**
Heater current, A **36-44**
Mutual conductance (at anode voltage 650 V, grid 2 voltage 400 V, anode current 1 A), mA/V **60-80**
Cutoff voltage (at anode voltage 18 kV, grid 2 voltage 400 V anode current 5 mA), V, at most **80**
Interelectrode capacitance, pF:
input, at most **78-93**
output, at most **9-14**
transfer, at most **0,1**
Warm up time, s at most **150**
Output power, W at least **400**
Output power over 2,000 h of service, W, at least **320**

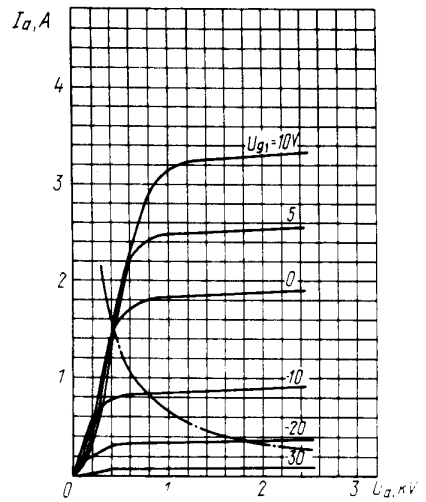
Limit Operating Values

Anode voltage, V **25-10³**
Peak anode voltage, V **47-10³**
Grid 2 voltage, V **500**
Negative grid 1 voltage, V **100**
Cathode current (DC component), mA **700**
Peak cathode current, mA **25-10³**
Dissipation, W:
anode **650**
grid **215**
grid **115**
Frequency, MHz **250**
Cathode heating time, s **150**
Temperature at anode, stem and seals, °C **150**

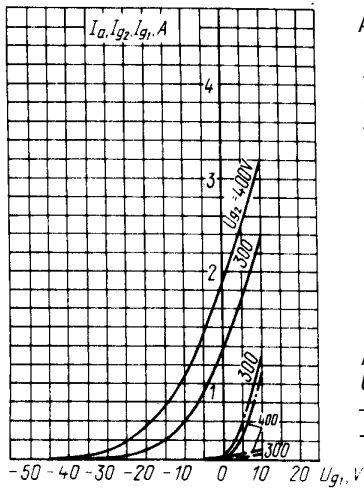




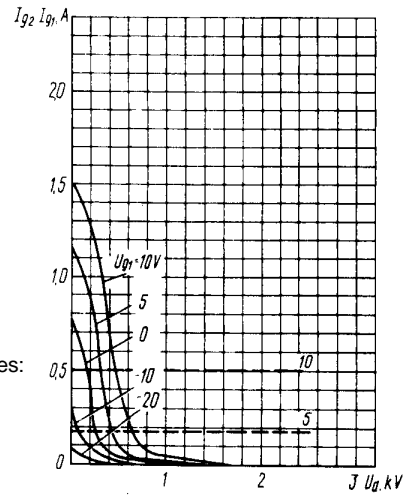
Averaged Anode Characteristic Curves:
 $U_1 = 12.6 \text{ V}; U_{g2} = 300 \text{ V};$
 — . — . — . $P_{a \text{ max}}$



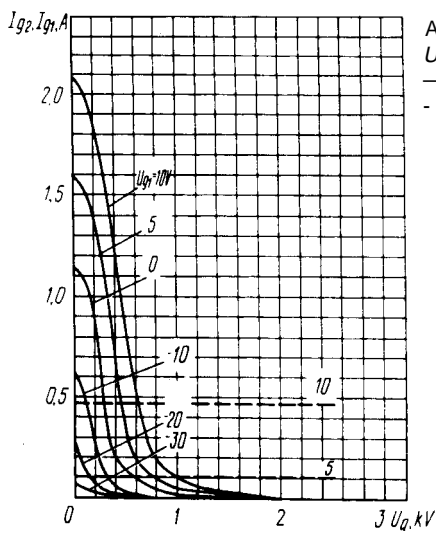
Averaged Anode Characteristic Curves:
 $U_1 = 12.6 \text{ V}; U_{g2} = 400 \text{ V};$
 — . — . — . $P_{a \text{ max}}$



Averaged Characteristic Curves:
 $U_1 = 12.6 \text{ V}; U_a = 100 \text{ V};$
 — anode-grid;
 - - - - grid 2;
 — . — . grid 1



Averaged Grid - Anode Characteristic Curves:
 $U_1 = 12.6 \text{ V}; U_{g2} = 300 \text{ V};$
 — grid 1;
 - - - - grid 2



Averaged Grid - Anode Characteristic Curves:
 $U_1 = 12.6 \text{ V}; U_{g2} = 400 \text{ V};$
 — grid 2;
 - - - - grid 1