

TETRODE

GU-36B-1

The GU-36B-1 power tetrode is used for wide-band power amplification at frequencies up to 250 MHz in stationary general-purpose RF equipment.

GENERAL

Cathode: directly heated, carbonized thoriated tungsten.
Envelope: metal-ceramic with ring leads.
Cooling: forced air.
Height: at most 300 mm.
Diameter: at most 184 mm.
Mass: at most 11 kg.

OPERATING ENVIRONMENTAL CONDITIONS

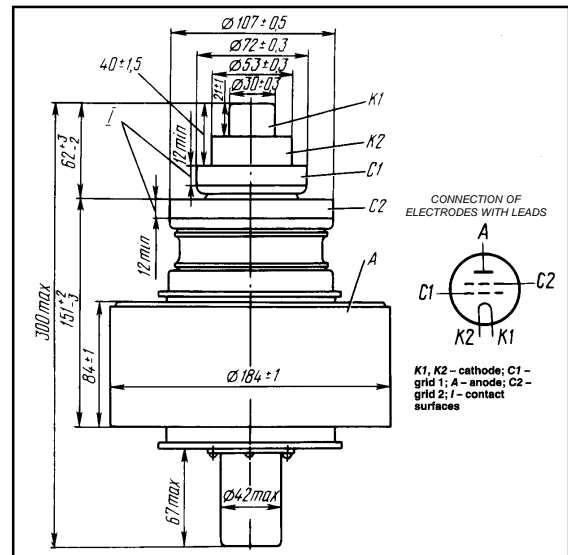
Ambient temperature, °C **-10 to +55**
Relative humidity at up to +25 °C, % **98**

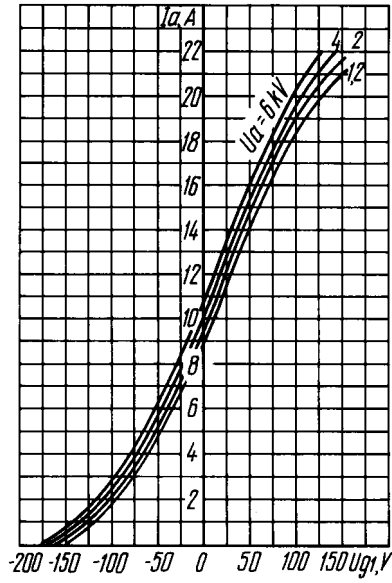
BASIC DATA Electrical Parameters

Filament voltage (AC or DC), V	8.3
Filament current, A	110-130
Mutual conductance (at anode voltage 2 kV, grid 2 voltage 750 V, anode currents 4 and 6 A), mA/V, at least	70-96
Gain coefficient (at anode voltage 2 kV, grid 2 voltages 750 and 500 V, anode current 4 A)	7-13
Anode current (at anode voltage 2 kV, grid 2 voltage 9000 V) A, at least	5
Negative cutoff voltage (at anode voltage 7 kV, grid 2 voltage 1200 V, anode current 0.3 A), absolute value, V, at most	220
Interelectrode capacitance, pF:	
input, at most	155
output, at most	24
transfer, at most	0.8
Output power (at frequencies up to 250 MHz, anode voltage at least 6 kV, grid 2 voltage 900 V, bandwidth 8 MHz), kW, at least	10

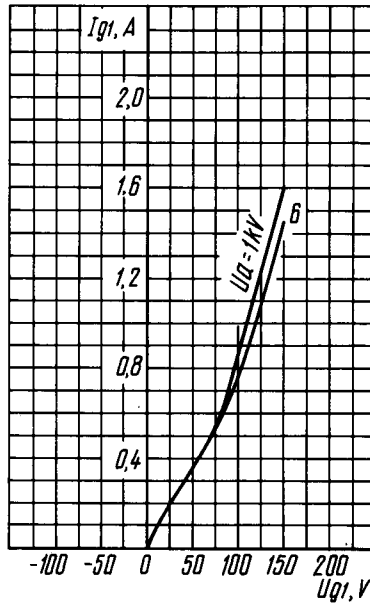
Limit Operating Values

Filament voltage (AC or DC), V:	
at up to 50 MHz	8.3
at above 50 MHz	8.0
Filament starting current, A	210
Anode voltage (DC), kV:	
at up to 100 MHz	8
at 100-250 MHz	7
Grid 2 voltage (DC), V	1100
Negative grid 1 voltage (instantaneous value), absolute value, V	400
Dissipation, W:	
anode	15·10³
grid 1	150
grid 2	300
Operating frequency, MHz	250
Temperature, °C:	
anode	250
stem and ceramic-to-metal seals	175

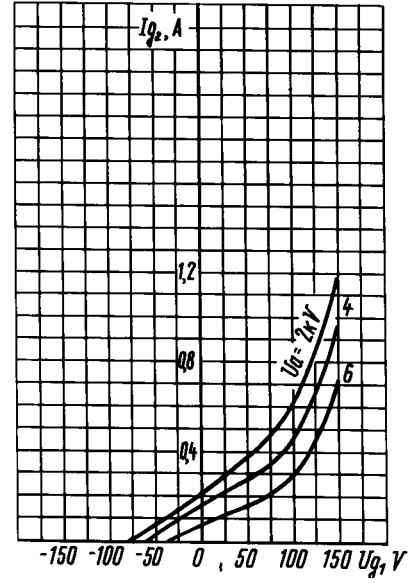




Averaged Anode-Grid Characteristic Curves:
 $U_1 = 8.3 \text{ V}$, $U_{g2} = 1.2 \text{ kV}$



Averaged Grid 1 Characteristic Curves:
 $U_1 = 8.3 \text{ V}$, $U_{g2} = 1.2 \text{ kV}$



Averaged Grid 2 Characteristic Curves:
 $U_1 = 8.3 \text{ V}$, $U_{g2} = 1.2 \text{ kV}$