Le Tube GU-81M

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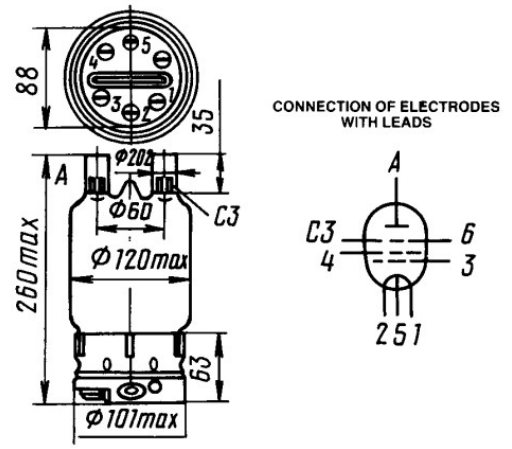
ГУ-81М
GU-81M

PENTODE

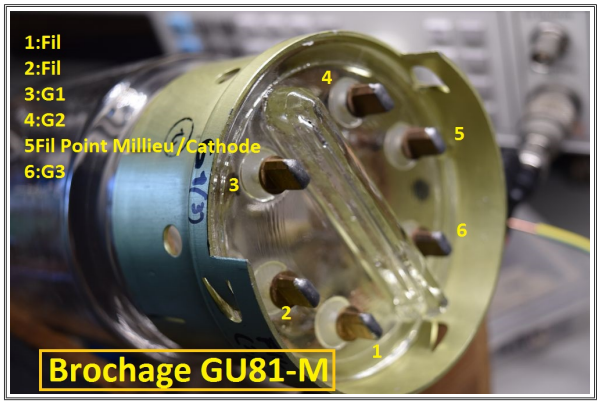
The ГУ-81М pentode is used in self-excited oscillation and power amplification circuits of RF equipment.



1, 2 – cathode; 3 – grid 1; 4 – grid 2; 5 – cathode centre tap; 6, C3 – grid 3; A – anode

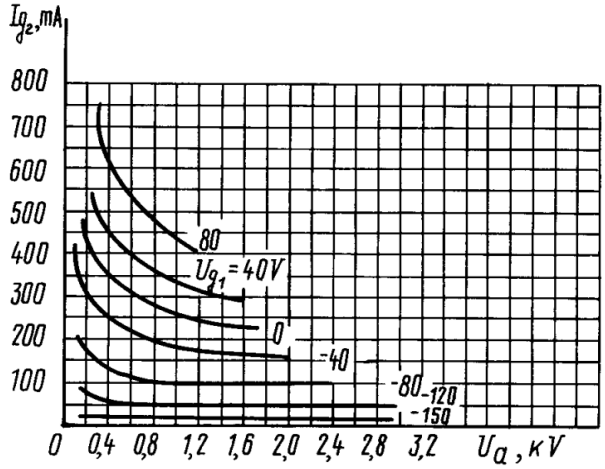
BASIC DATA
Electrical Parameters

Filament voltage V	12.6
Filament current, A, at most	11
Mutual conductance (at anode voltage 2 kV, grid 2 voltage 600 V, anode current 200 mA), mA/V	4.5–6.5
Gain coefficient (grid 1–grid 2) (at anode voltage 2 kV, grid 2 voltages 600 and 500 V, anode current 200 mA)	2.5–4
Bias voltage (at anode voltage 2 kV, grid 2 voltage 600 V), V	116–160
Interelectrode capacitance, pF:	
input	25–32
output	21–26
grid 1–anode, at most	0.1
grid 1–grid 3	1–4
Output power (at anode voltage 2 kV, grid 2 voltage 600 V, bias voltage −200 V, grid 1 drive voltage amplitude 300 V, anode current, at least 450 mA, grid 1 current at most 20 mA, grid 2 current, at most 220 mA), W, at least	700

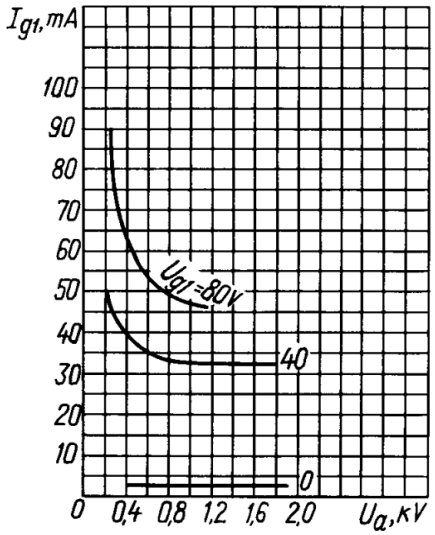


Limit Operating Values

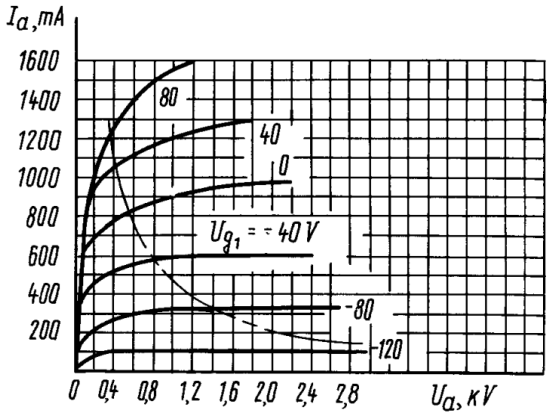
Filament voltage, V	11.6–13.4
Anode voltage, V:	
at frequencies not above 6 MHz	3
at frequencies not above 24 MHz	2.5
at frequencies not above 50 MHz	1.5
Grid 2 voltage, V	600
Anode current (average value), A	0.6
Grid 1 current (average value), A	0.02
Grid 2 current (average value), A	0.2
Dissipation, W:	
anode	450
anode (momentary dissipation)	600
grid 2	120
grid 1	10
Envelope temperature, °C	350



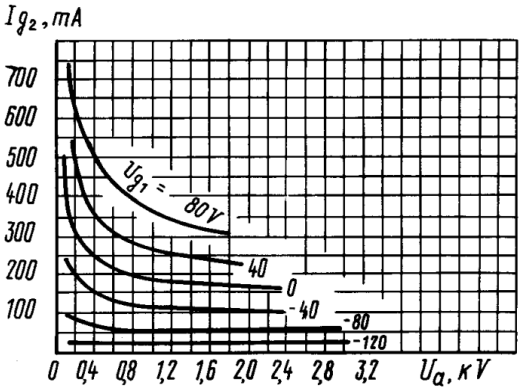
Averaged Characteristic Curves:
U_f = 12.6 V; U_{g2} = 0.6 kV



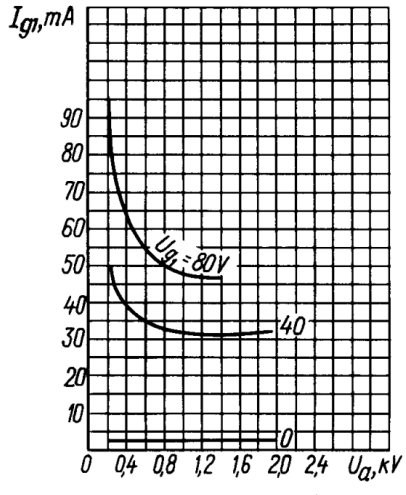
Averaged Grid-Anode Characteristic Curves:
U_f = 12.6 V; U_{g2} = 0.5 kV



Averaged Anode Characteristic Curves:
U_f = 12.6 V; U_{g2} = 0.5 kV;
— · — ($P_{a\,max}$)



Averaged Grid 2-Anode Characteristic Curves:
U_f = 12.6 V; U_{g2} = 0.5 kV



Averaged Grid-Anode Characteristic Curves:
U_f = 12.6 V; U_{g2} = 0.6 kV

Averaged Characteristic Curves:
U_f = 12.6 V; U_a = 2.5 kV;
——— anode-grid;
– – – – grid 2