

Le Tube GU-81M

Par JP Quintin f6evt

ГУ-81М
GU-81M

PENTODE

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

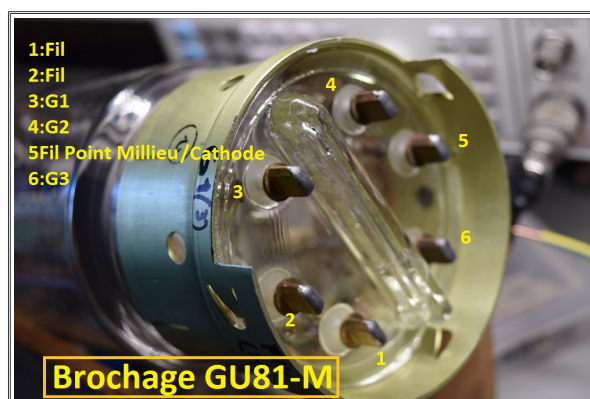
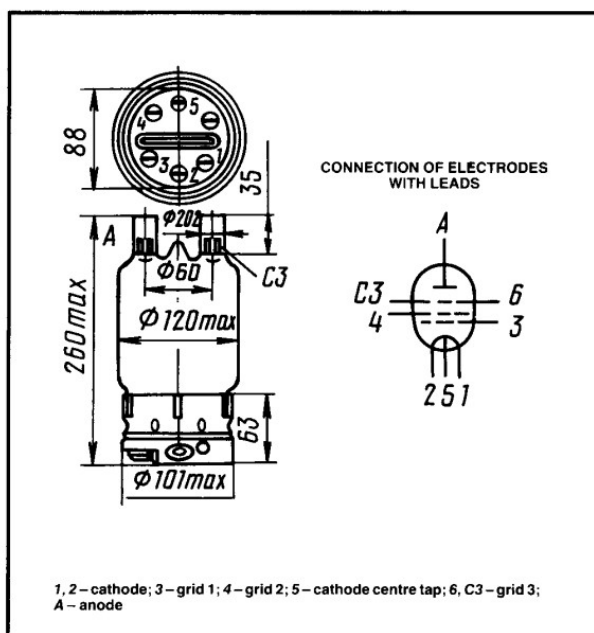
BASIC DATA

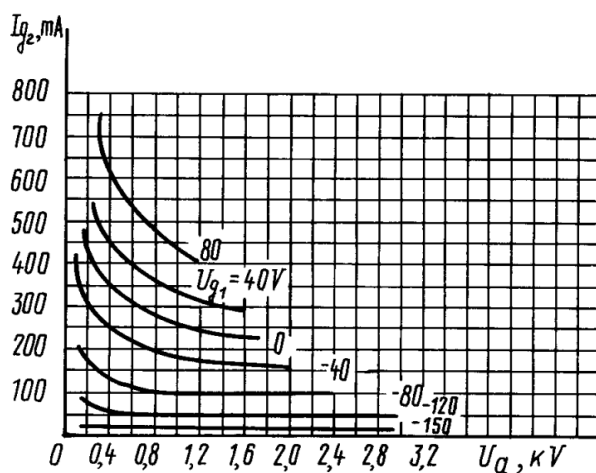
Electrical Parameters

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

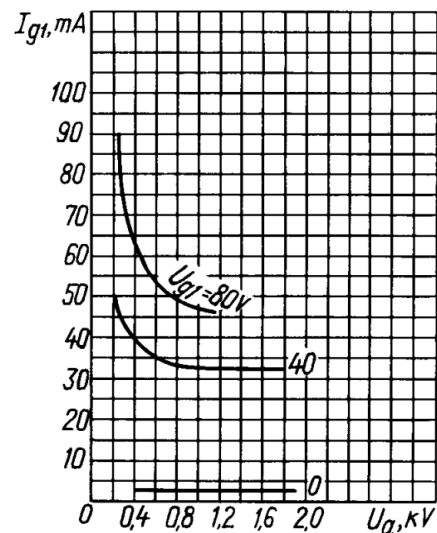
Limit Operating Values

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

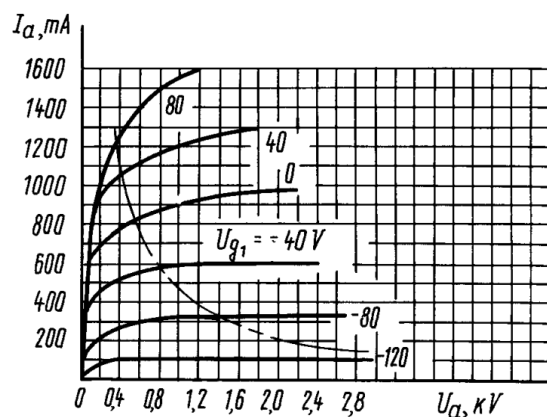




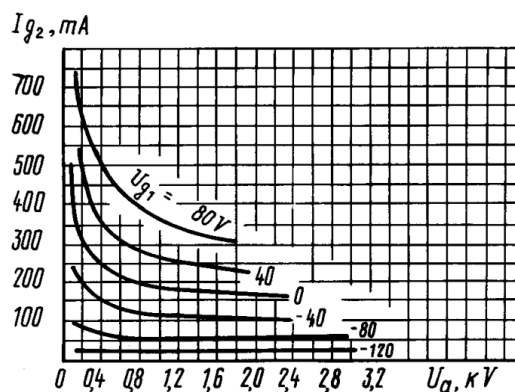
Averaged Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_{g2} = 0.6 \text{ kV}$



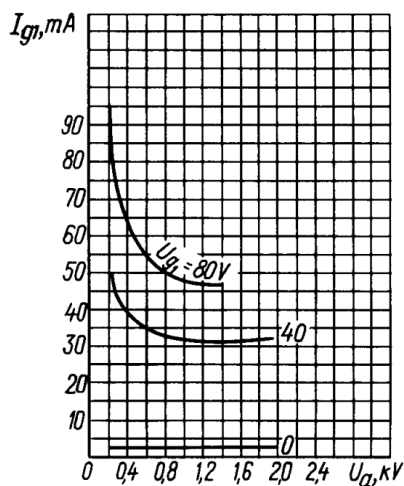
Averaged Grid-Anode Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_{g2} = 0.5 \text{ kV}$



Averaged Anode Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_{g2} = 0.5 \text{ kV}$;
 — — — — — (P_{max})



Averaged Grid 2-Anode Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_{g2} = 0.5 \text{ kV}$



Averaged Grid-Anode Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_{g2} = 0.6 \text{ kV}$

Averaged Characteristic Curves:
 $U_i = 12.6 \text{ V}$; $U_a = 2.5 \text{ kV}$;
 — — — — — anode-grid;
 - - - - - grid 2

