

PENTODE

GU-81M

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

GENERAL

Cathode: directly heated, carbonized thoriated tungsten.
 Envelope: glass, with base.
 Height: at most 260 mm.
 Diameter: at most 202 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

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-grid3 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

