

TRIODE

GS-35B

The GC-35B triode provides continuous-wave generation in external-feedback self-sustained oscillators and amplifiers at up to 1000 MHz, in circuits with a common point at grid.

GENERAL

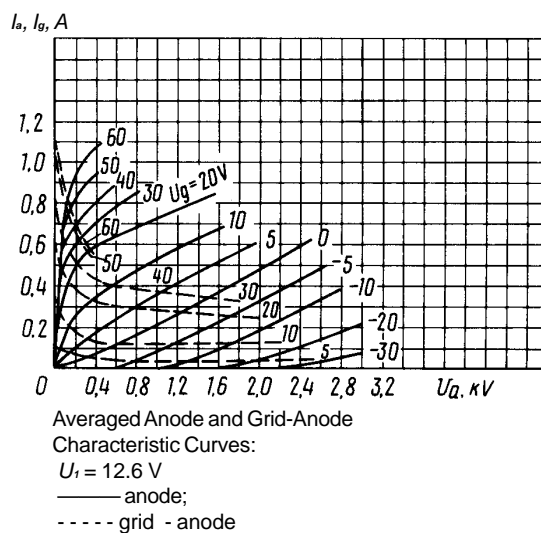
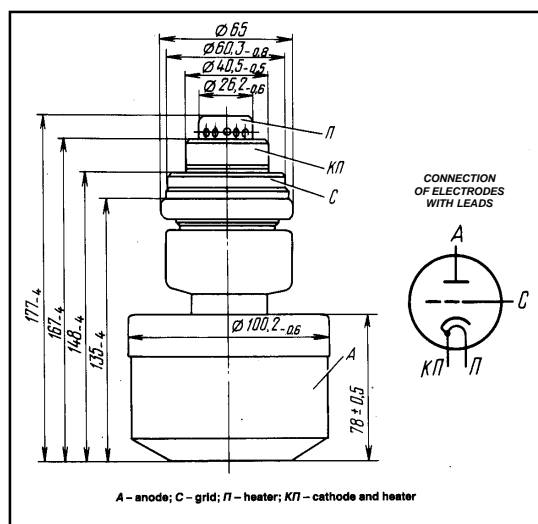
Cathode: indirectly heated, oxide-coated.
 Envelope: metal-ceramic.
 Cooling: forced air.
 Height: at most 177 mm.
 Diameter: at most 100.2 mm.
 Mass: at most 2.8 kg.

OPERATING ENVIRONMENTAL CONDITIONS

frequency range, Hz	50-200
acceleration, m/s ²	59
Multiple impacts with acceleration, m/s ²	343
Linear loads with acceleration, m/s ²	88
Lowest ambient temperature, °C	-60
Relative humidity at up to +40 °C, %	98

BASIC DATA ELECTRICAL PARAMETERS

Heater voltage, V	12.6
Heater current, A	2.65-3.25
Mutual conductance (at anode voltage 2.5 kV, grid voltage change -1 V, anode current 0.4 A), mA/V	25-40
Penetration factor (at anode voltage 2.5 kV, grid voltage change -200 V, anode current 0.4 A), %	0.8-1.2
Operating point (negative grid voltage at anode voltage 2.5 kV, anode current 0.4 A), V	12-6
Interelectrode capacitance, pF:	
input	18-24
output, at most	0.12
transfer	3.8-5.0
Warm up time, s, at most	90
Output power, W:	
at anode voltage 2.5 kV, anode current 0.7 A, wavelength 60 cm, at least	800
at anode voltage 2.2 kV, anode current 0.8 A, wavelength 30 cm, at least	350
Output power over 500 h of service (at anode voltage 2.5 kV, anode current 0.7 A, wavelength 60 cm), W, at least	650

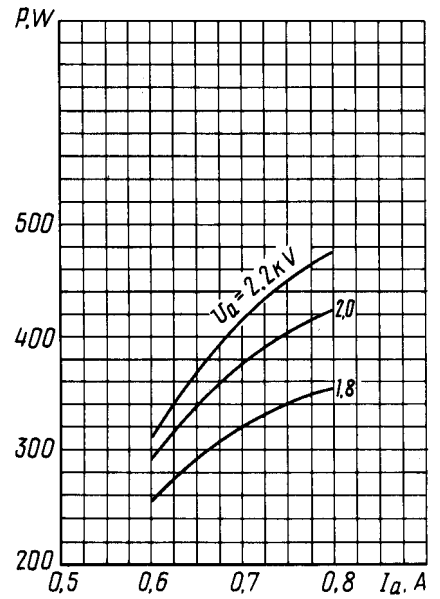


LIMIT OPERATING VALUES

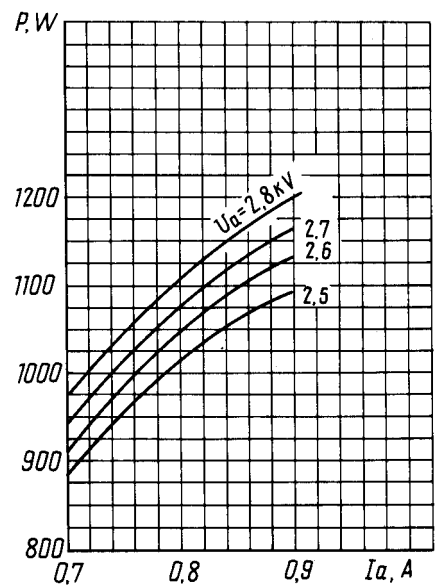
Heater voltage, V	11.9-13.3
Anode voltage, kV:	
DC	3
instantaneous value	6
Grid voltage, V	-400 to +120
Cathode current, A	1.4
Dissipation, W:	
anode	1.5-10³
grid	26
Temperature, °C:	
anode	200
grid and cathode leads	120

STANDARD OPERATING CONDITIONS

	Condition I	Condition II
Heater voltage, V	12.6	12.6
Anode voltage, kV	2.2	2.5
Anode current, A	0.8	0.7
Output power, W, at least	350	800
Wavelength, cm	30	60



Characteristic Curves showing Output Power versus Anode Current:
 $U_i = 12.6V, \lambda = 30 \text{ cm}$



Characteristic Curves showing Output Power versus Anode Current:
 $U_i = 12.6V, \lambda = 60 \text{ cm}$