

Tung-Sol KT170

Due to the success of the KT120 and KT150 tubes and the popularity of these tubes with High-End Audio manufacturers, the Tung-Sol KT170 tube has been developed to provide a beam tetrode with even more power capability. The Tung-Sol KT170 has a power dissipation of 85 watts allowing amplifiers using a pair of these tubes to reach power output levels in excess of 300 watts.

The Tung-Sol KT170 has an original shape glass bulb that was designed specifically to maintain the highest vacuum and dissipate heat when the tube is operated at high power levels. The Tung-Sol KT170 also has an equipotential cathode for increased reliability and to effectively amplify audio frequencies in the output stages of High-End Audio equipment.

The Tung-Sol KT170 is the largest and most powerful tube in the 6550, KT88, KT90, KT120, and KT150 series of audio tubes.

KT1170 Tung-Sol
 $I_p=f(E_p)$
 $E_f=6.3V, E_{g2}=225V$

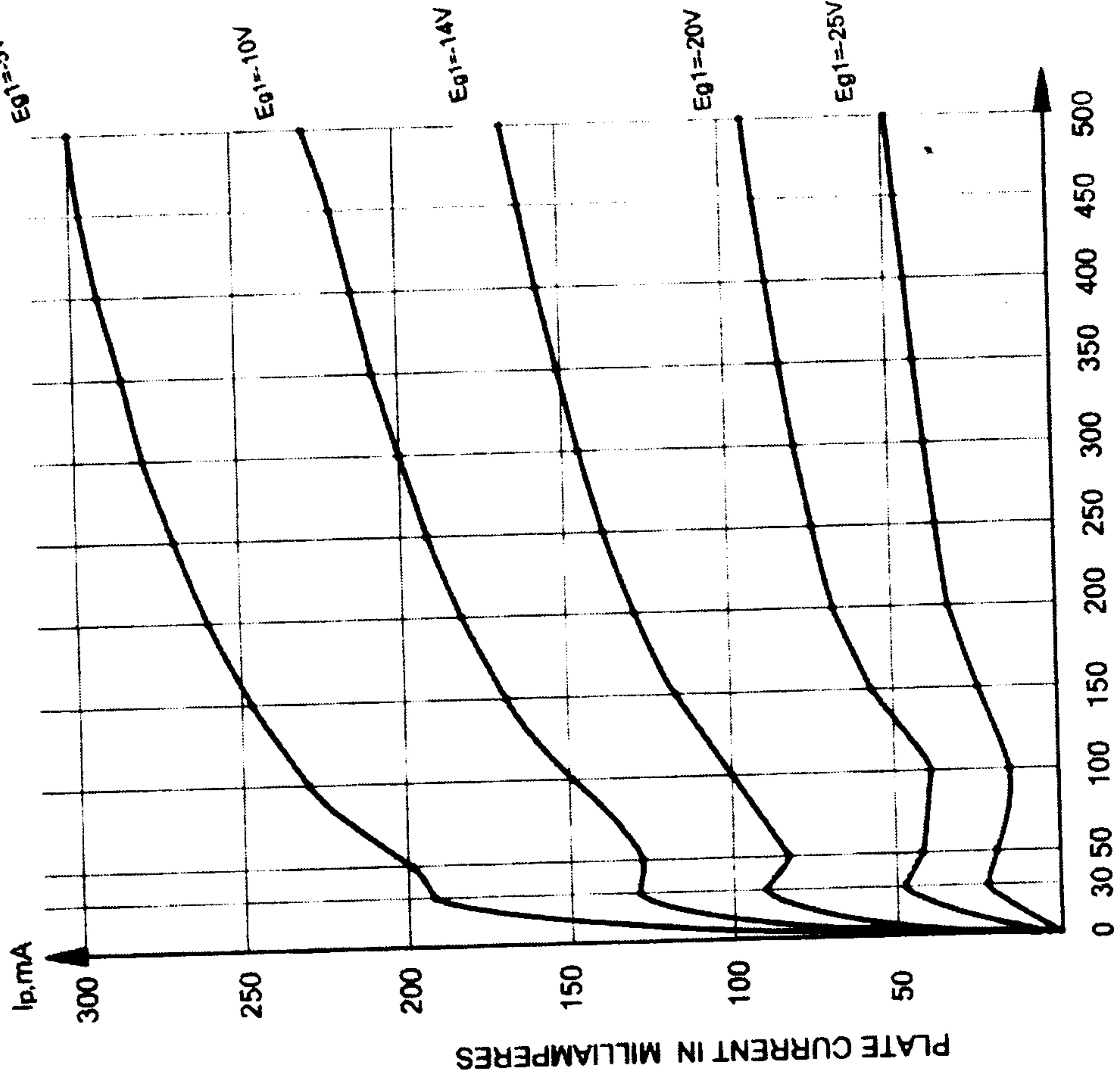
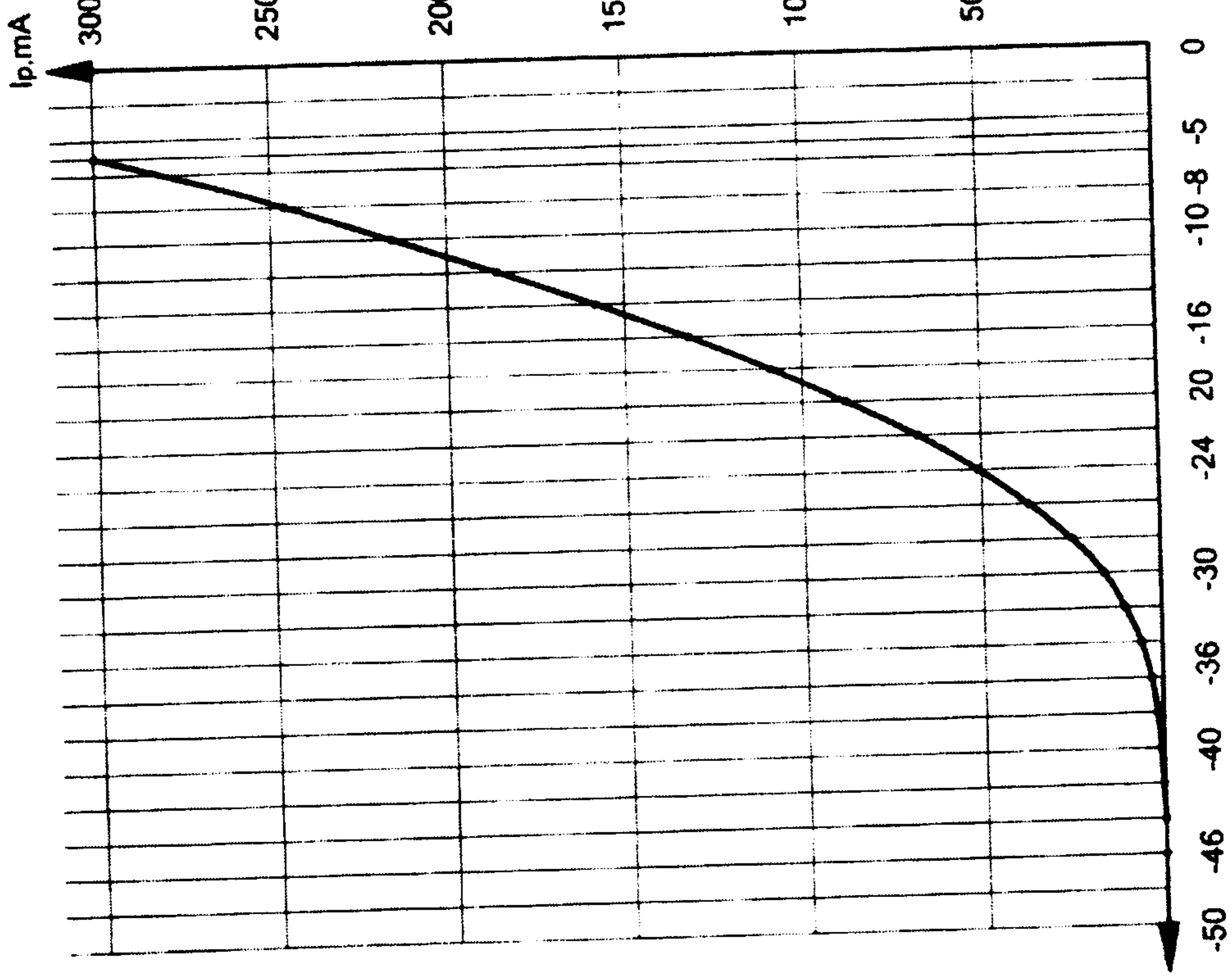


PLATE VOLTAGE IN VOLTS

KT1170 Tung-Sol
 $I_p=f(E_{g1})$
 $E_f=6.3V, E_p=400V, E_{g2}=225V$



GRID VOLTAGE IN VOLTS

Electrical parameters

KT170 Tung - Sol

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V, first grid circuit resistance 0.51M Ω)	—	1.2
Heater current, A	1.75	2.0
Plate current, mA (at: filament voltage 6.3 V plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	155	210
Second grid current, mA (at: filament voltage 6.3 V plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	—	25
* Output power, W (at: filament voltage 6.3 V plate voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V, plate circuit resistance 3.0 k Ω first grid alternating voltage, efficacious 9.9 V)	24	—
First grid cut-off voltage, negative, V (at: filament voltage 6.3 V plate voltage 400 V, second grid voltage 225 V)	—	- 60
Slope of characteristic, mA/V (at: filament voltage 6.3 V anode voltage 400 V, first grid voltage minus 14.0 V, second grid voltage 225 V)	14	—
Distortion factor, %	—	15.0
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V cathode -heater voltage \pm 300 V)	6.0	—

T =
235
mA

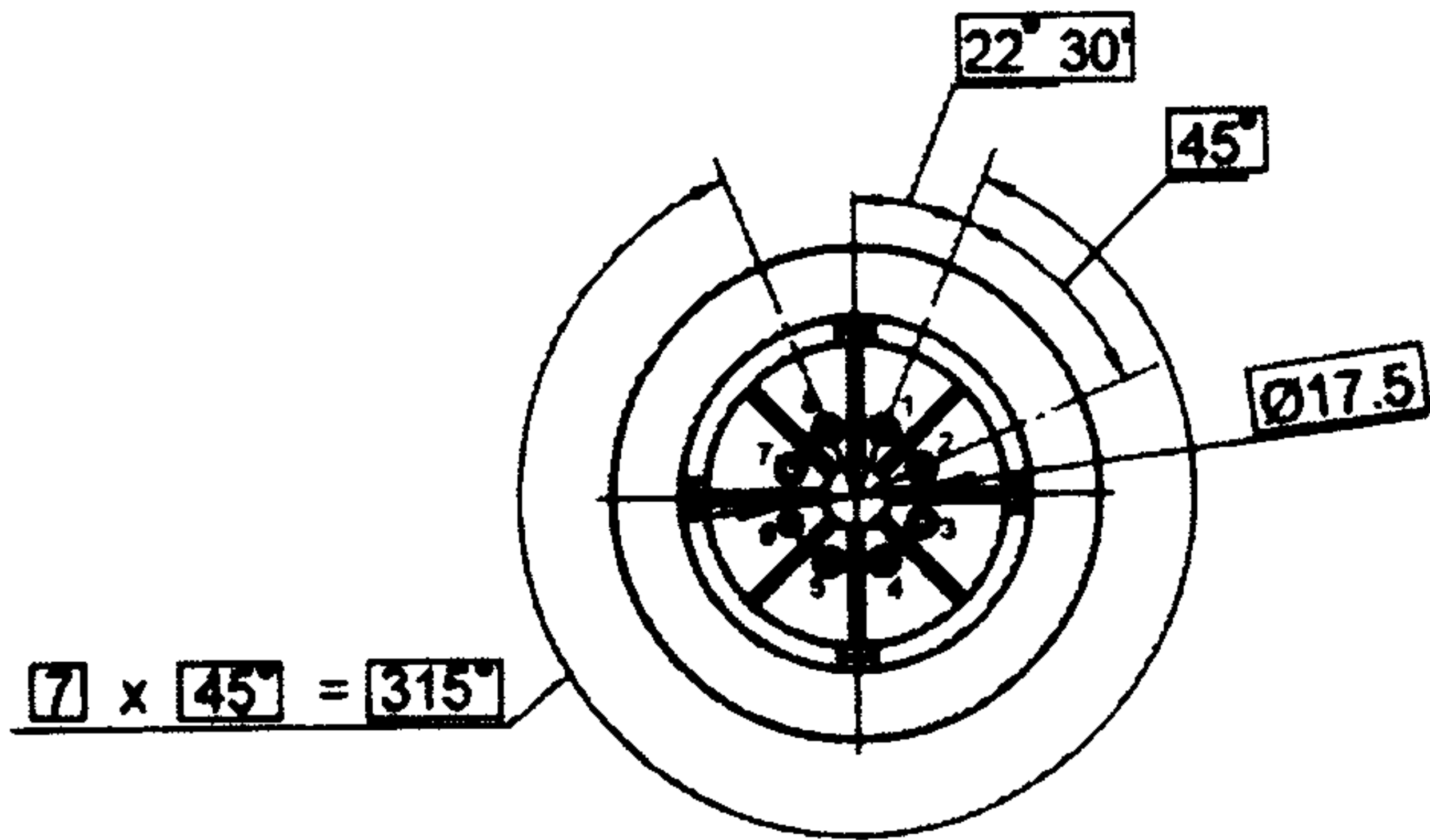
Maximum permissible operating conditions

Parameters, units	Nominal	
	min	max
Filament voltage, V	6.0	6.6
Plate voltage, V	—	850
Second grid voltage, V	—	650
Cathode - heater voltage, V	—	\pm 300
Cathode current, mA	—	300
First grid voltage, negative, V	—	200
Power dissipation at the plate, W	—	85
Power dissipation at the second grin, W	—	11
First grid circuit resistance for each, M Ω	—	0.51
Temperature at the most heated part of the envelope, K $^{\circ}$	—	523

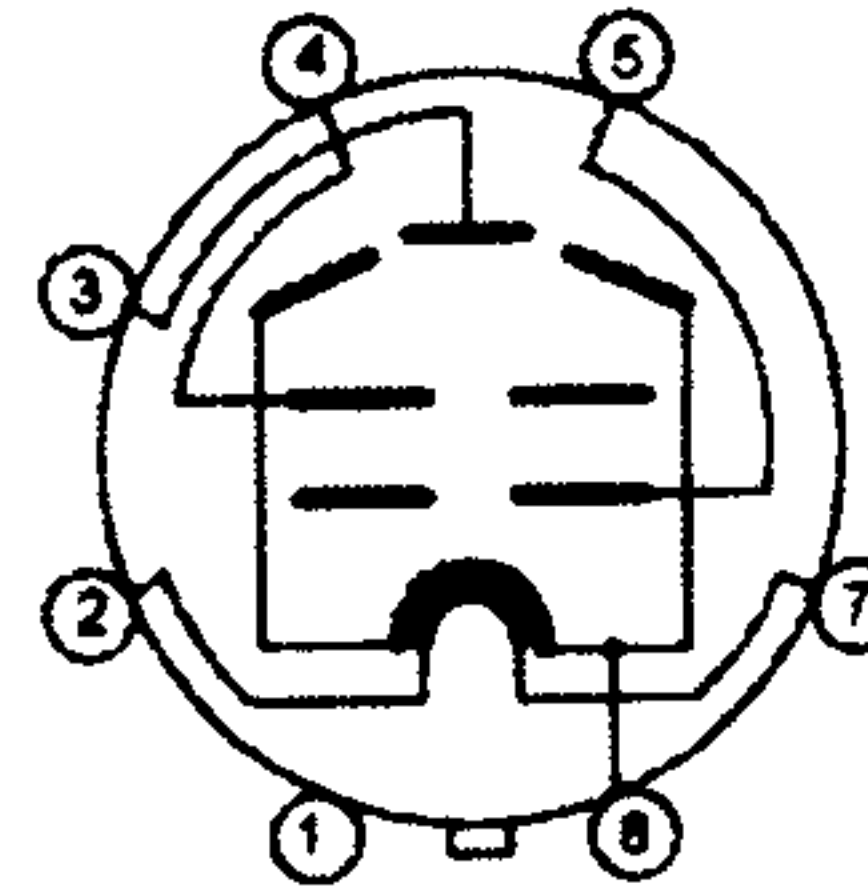
T =
96W

Vacuum tube KT170 Tung - Sol is a beam tetrode in original shape glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

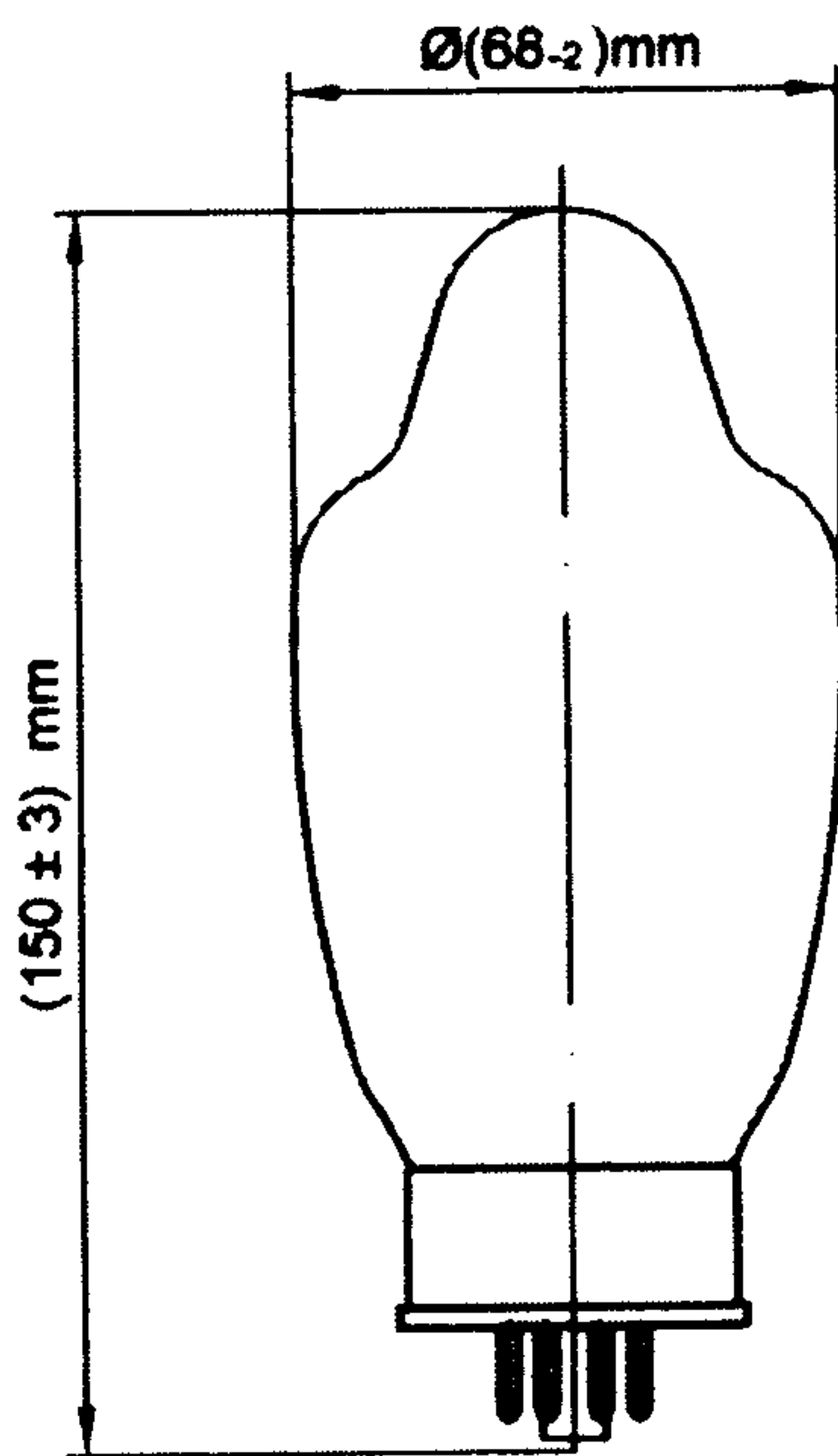
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1	Outer metal screen
2, 7	Heater
3	Plate
4	Grid 2
5	Grid 1
6	Empty
8	Cathode, beam-forming screen