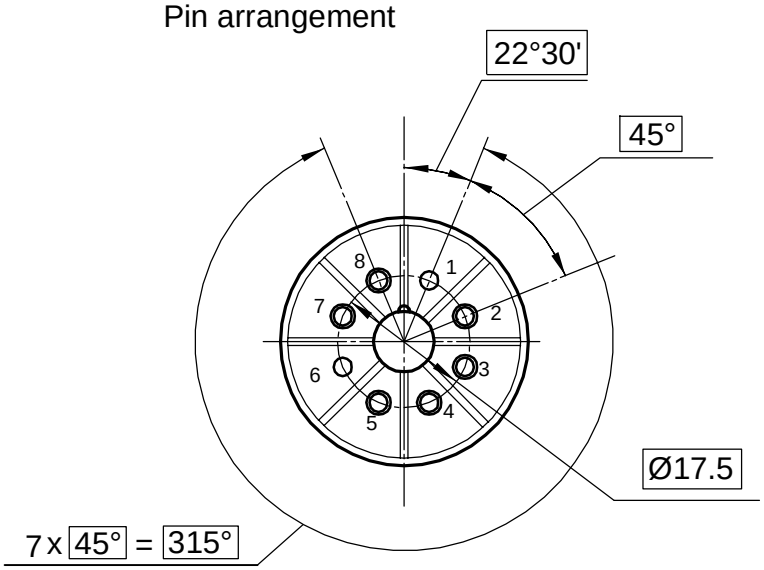
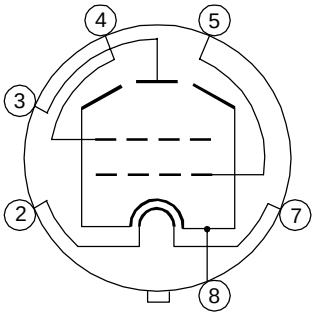
Vacuum tube 6V6GT/6V6EH is a beam tetrode in the glass bulb, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

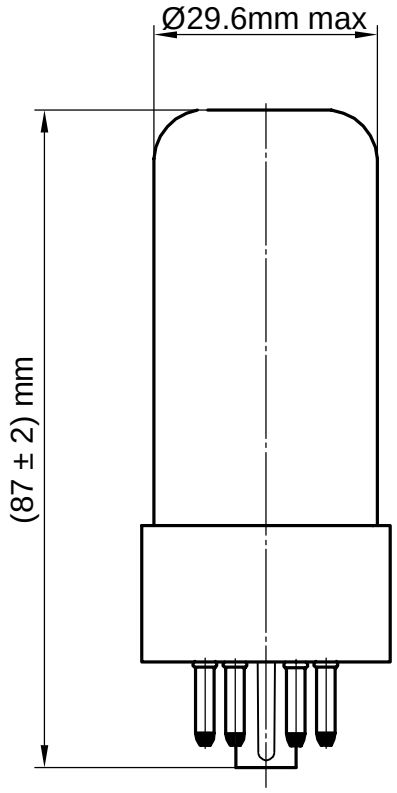
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



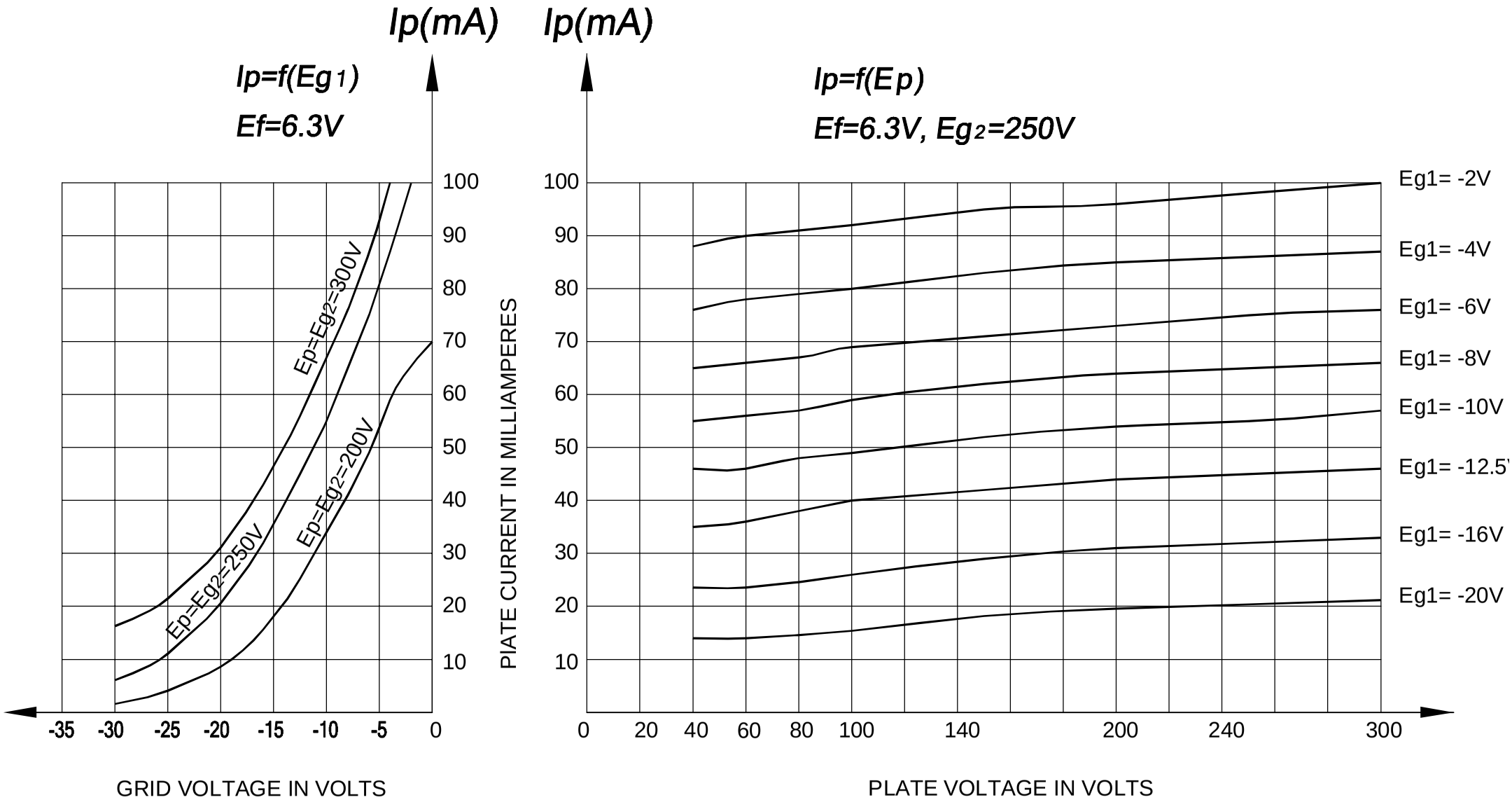
Lead designation	Name of electrode
1, 6	No
2, 7	Heater
3	Plate
4	Grid 2
5	Grid 1
8	Cathode, beam-forming screen

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V, first grid circuit resistance 0.1 MΩ)	—	2.0
Heater current, mA	460	530
Plate current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V)	33	59
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V)	—	8.0
Output power, W (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V, plate circuit resistance 5.0 kΩ first grid alternating voltage, efficacious 8.8 V)	3.2	—
Output power at low voltage, W (at: filament voltage 5.7 V plate voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V, plate circuit resistance 5.0 kΩ first grid alternating voltage, efficacious 8.8 V)	2.9	—
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 250 V, first grid voltage minus 12.5 V, second grid voltage 250 V)	3.0	5.2
Cahtode - heater insulation resistance, MΩ (at: filament voltage 6.3 V, cathode -heater voltage ± 100 V)	2.0	—

Operating conditions limits

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	7.0
Cathode - heater voltage, V	—	± 180
Power dissipation at the plate, W	—	13.2
Power dissipation at the second grid, W	—	2.2
First grid circuit resistance, MΩ fixed bias self - bias	 — —	 0.1 0.51
Temperature at the most heated part of the envelope, K°	—	483


Ip(mA)
Ip=f(Eg1)
Ef=6.3V
Ep=Eg2=300V
Ep=Eg2=250V
Ep=Eg2=200V
100
90
80
70
60
50
40
30
20
10
-35
-30
-25
-20
-15
-10
-5
0
GRID VOLTAGE IN VOLTS
PIATE CURRENT IN MILLIAMPERES
Ip(mA)
Ip=f(Ep)
Ef=6.3V, Eg2=250V
Eg1= -2V
Eg1= -4V
Eg1= -6V
Eg1= -8V
Eg1= -10V
Eg1= -12.5
Eg1= -16V
Eg1= -20V
0
20
40
60
80
100
140
200
240
300
PLATE VOLTAGE IN VOLTS