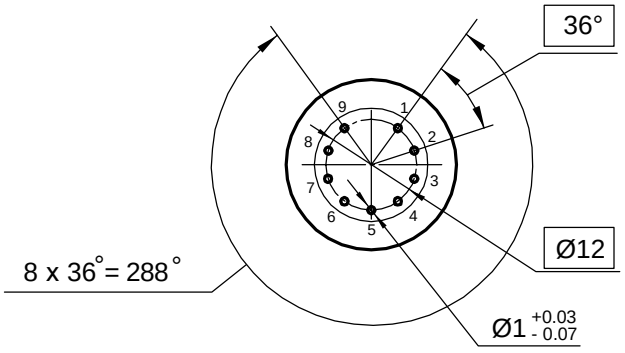
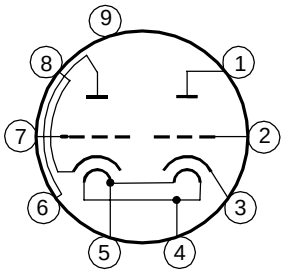
Vacuum tube 6CG7EH is a miniature twin triode with equipotential cathodes, designed to amplify low freguency voltage in radio engineering devices.

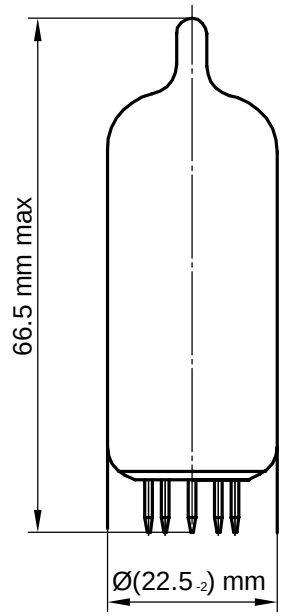
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



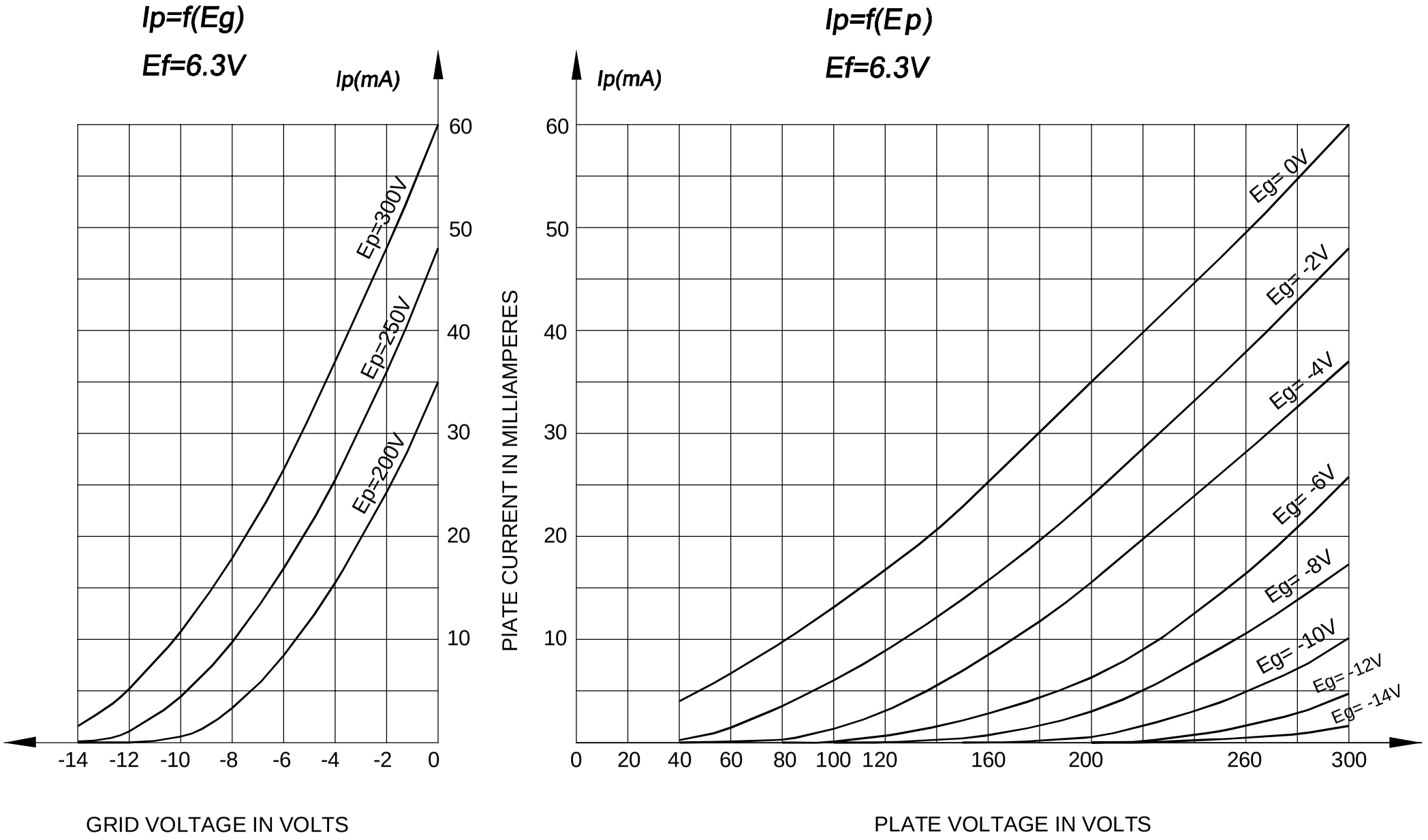
Lead designation	Name of electrode
1	Second triode plate
2	Second triode grid
3	Second triode cathode
4, 5	Heater
6	First triode plate
7	First triode grid
8	First triode cathode
9	Free

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA	550	680
Grid reverse current, μA, (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V, resistance in grid circuit 1.0 MΩ)	—	0.2
Plate current, mA, (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	7	14
First and second triodes plate current difference, % (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	—	± 30
Plate current at the beginning of the characteristic, μA (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 18 V)		50
Slope of characteristic, mA/V (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	2.0	3.8
Amplification factor (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	16.5	—
Cathode - heater insulation resistance, MΩ (at: filament voltage 6.3 V, cathode -heater voltage ± 200 V)	13.3	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	6	6.6
Plate voltage, V	—	330
Cathode - heater voltage, V	—	± 200
Cathode current, mA	—	20
Power dissipation at the plate of each triode, W	—	4.0
Grid circuit resistance for each of the triodes, MΩ fixed bias self - bias	 — —	 1.0 2.0


Ip=f(Eg)
Ef=6.3V
Ip(mA)
60
50
40
30
20
10
Ep=300V
Ep=250V
Ep=200V
-14
-12
-10
-8
-6
-4
-2
0
GRID VOLTAGE IN VOLTS
Ip=f(Ep)
Ef=6.3V
Ip(mA)
PIATE CURRENT IN MILLIAMPERES
Eg= 0V
Eg= -2V
Eg= -4V
Eg= -6V
Eg= -8V
Eg= -10V
Eg= -12V
Eg= -14V
0
20
40
60
80
100
120
160
200
260
300
PLATE VOLTAGE IN VOLTS