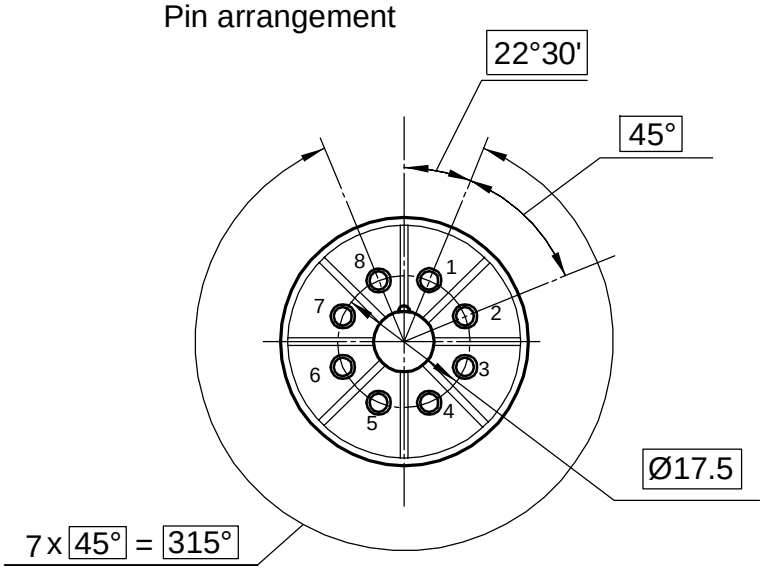
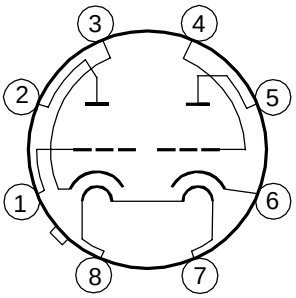
6SN7EH gold

Vacuum tube 6SN7EH gold is a twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

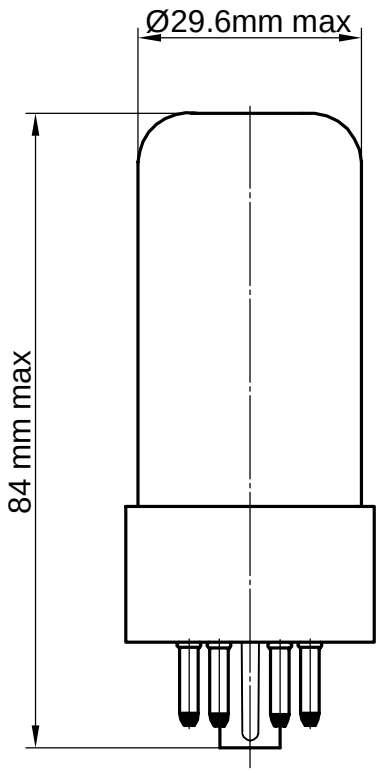
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



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

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current,mA at: filament voltage 6.3 V	550	650
Grid back 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
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, mA, (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	7.0	13.0
Slope of characteristic, mA/V (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	2.0	3.6
Amplification factor (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 8.0 V)	16.5	—
Plate current at the beginning of the characteristic, µA (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 18.0 V)	—	50
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	6.0	6.6
Plate voltage, V	—	450
Cathode - heater voltage, V	—	± 200
Cathode current, mA	—	20
Power dissipation at the plate of each triode, W	—	2.5
Grid circuit resistance for each of the triodes, MΩ fixed bias self - bias	 — —	 1.0 2.0

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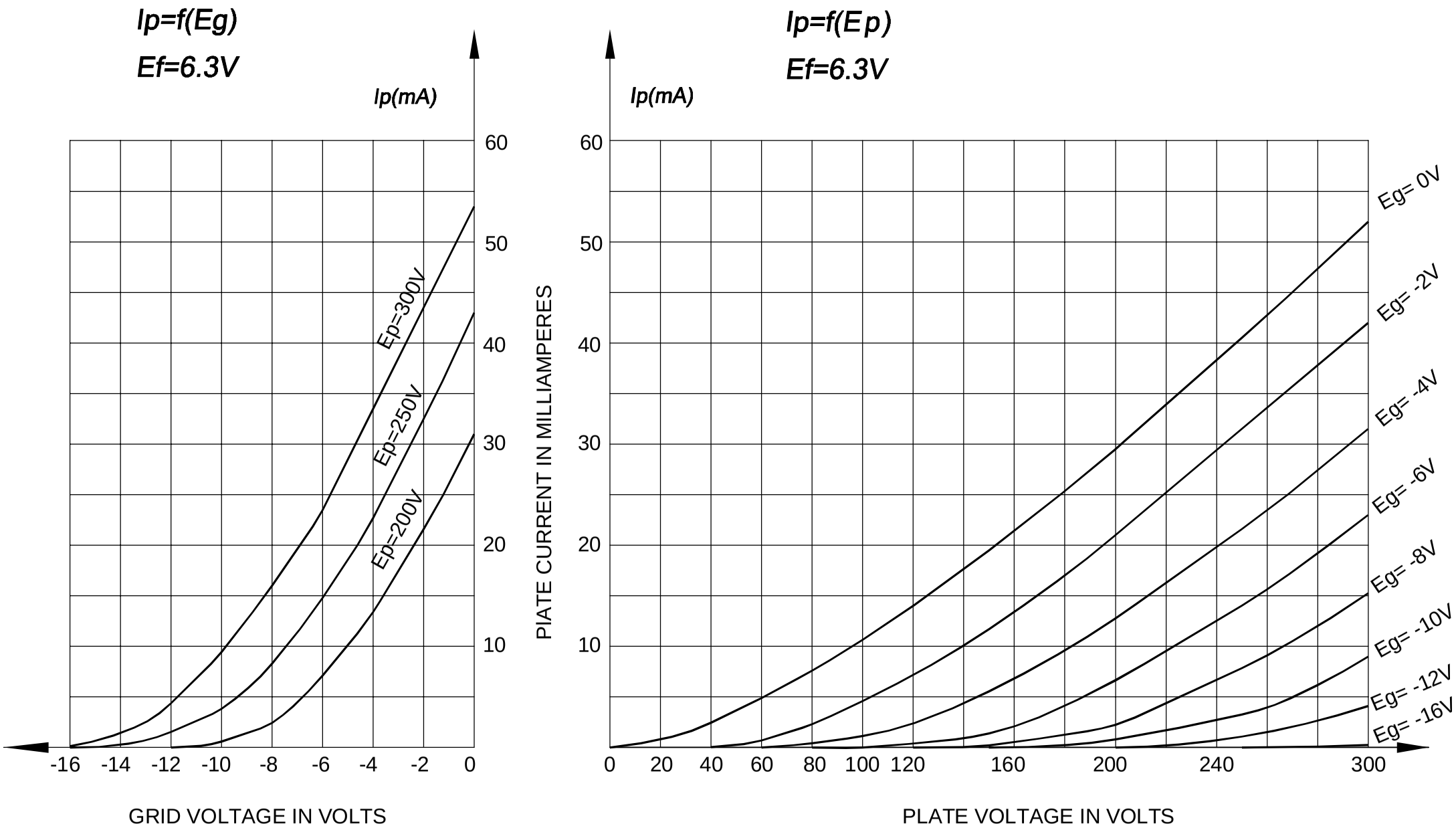
Ip=f(Eg)
Ef=6.3V
Ip(mA)
60
50
40
30
20
10
Ep=300V
Ep=250V
Ep=200V
-16 -14 -12 -10 -8 -6 -4 -2 0
GRID VOLTAGE IN VOLTS
PIATE CURRENT IN MILLIAMPERES
Ip=f(Ep)
Ef=6.3V
Ip(mA)
60
50
40
30
20
10
Eg= 0V
Eg= -2V
Eg= -4V
Eg= -6V
Eg= -8V
Eg= -10V
Eg= -12V
Eg= -16V
0 20 40 60 80 100 120 160 200 240 300
PLATE VOLTAGE IN VOLTS