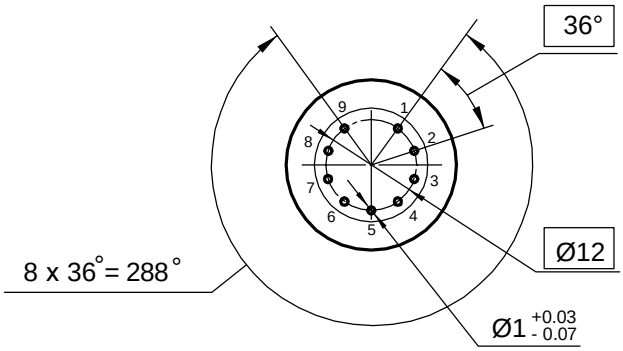
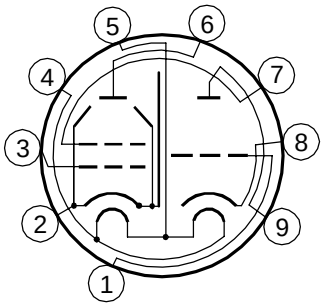
Vacuum tube 6BM8EH is a miniature triode - pentode with equipotential cathodes, designed to amplify low freguency voltage in radio engineering devices.

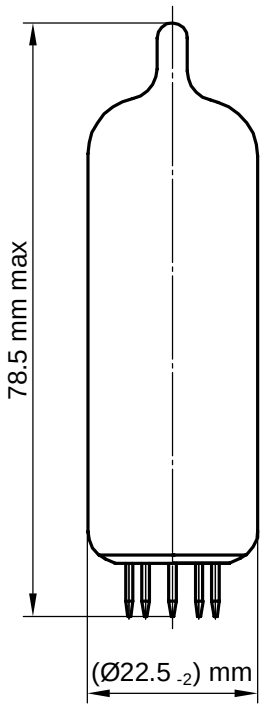
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1	Triode grid
2	Pentode cathode, screen, beam-forming screen
3	Pentode first grid
4, 5	Heater
6	Pentode plate
7	Pentode second grid
8	Triode cathode
9	Triode plate

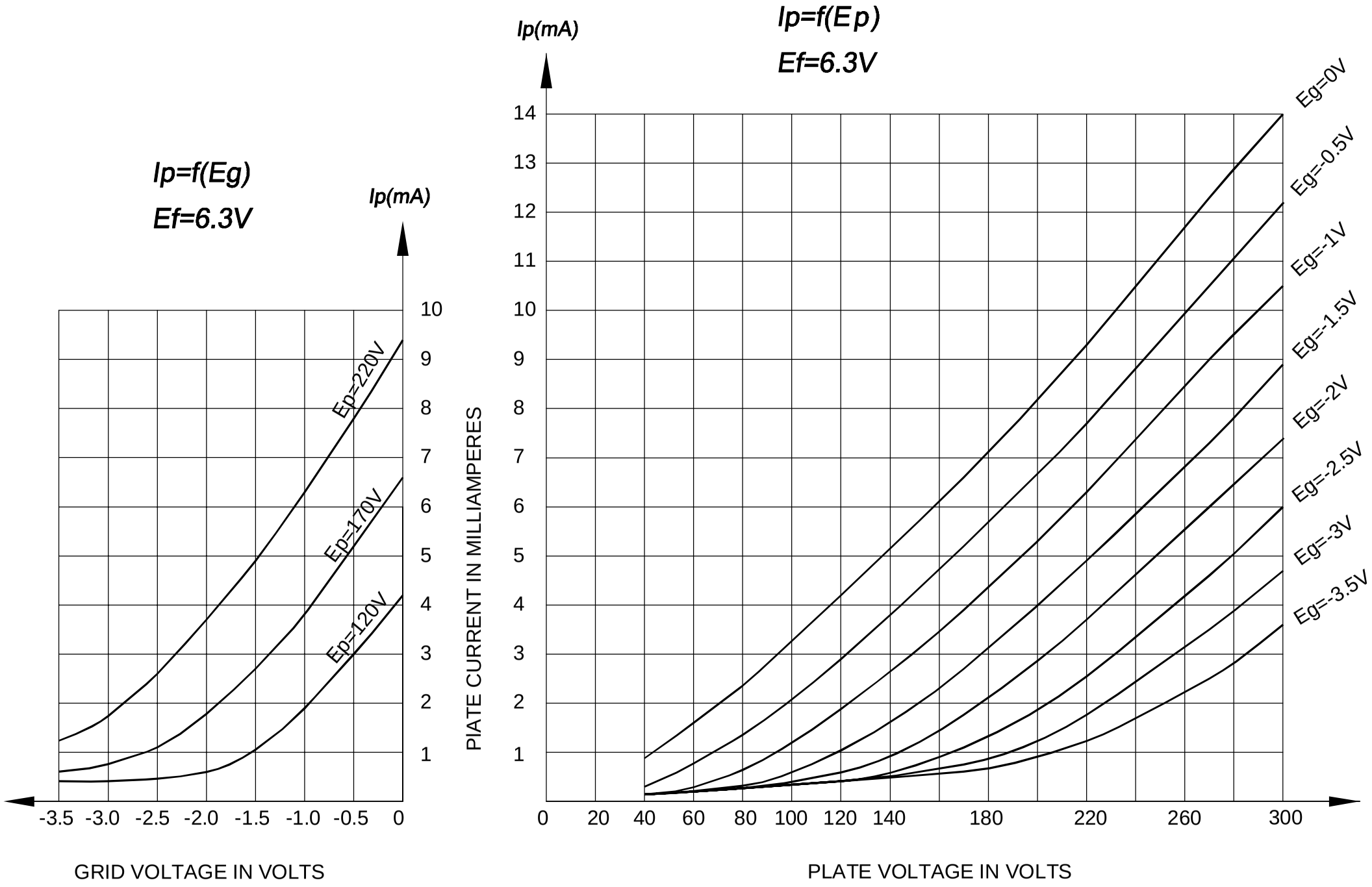
Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA	770	930
Triode grid reverse current, μA, (at: filament voltage 6.3 V, triode plate voltage 170 V, triode grid voltage minus 1.5 V, resistance in triode grid circuit 1.0 MΩ)	—	0.5
Triode plate current, mA, (at: filament voltage 6.3 V, triode plate voltage 170 V, triode grid voltage minus 1.5 V)	1.3	3.7
Triode slope of characteristic, mA/V (at: filament voltage 6.3 V, triode plate voltage 170 V, triode grid voltage minus 1.5 V)	1.3	3.7
Triode amplification factor, (at: filament voltage 6.3 V, triode plate voltage 170 V, triode grid voltage minus 1.5 V)	50	—
Triode cathode - heater insulation resistance, MΩ, (at: filament voltage 6.3 V , cathode - heater voltage ± 100 V)	5.0	
Pentode first grid reverse current, μA, (at: filament voltage 6.3 V, pentode plate voltage 170 V, pentode first grid voltage minus 11.5 V, pentode second grid voltage 170 V, resistance in pentode first grid circuit 0.51 MΩ)	—	0.5
Pentode plate current, mA, (at: filament voltage 6.3 V, pentode plate voltage 170 V, pentode first grid voltage minus 11.5 V, pentode second grid voltage 170 V)	28	54
Pentode slope of characteristic, mA/V (at: filament voltage 6.3 V, pentode plate voltage 170 V, pentode first grid voltage minus 11.5 V, pentode second grid voltage 170 V)	5.0	9.0
Pentode second grid current, mA, (at: filament voltage 6.3 V, pentode plate voltage 170 V, pentode first grid voltage minus 11.5 V, pentode second grid voltage 170 V)	—	14
Pentode cathode - heater insulation resistance, MΩ, (at: filament voltage 6.3 V, cathode - heater voltage ± 100 V)	3.3	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	6.9
Triode plate voltage, V	—	250
Pentode plate voltage, V	—	275
Pentode second grid voltage, V	—	250
Cathode - heater voltage, V	—	± 100
Power dissipation at the plate of triode, W	—	1.0
Power dissipation at the plate of pentode, W	—	8.0
Power dissipation at the second grid of pentode, W		2.5
Grid circuit resistance for triode, M Ω fixed bias self - bias	 — —	 1.0 1.0
First grid circuit resistance for pentode, M Ω fixed bias self - bias	 — —	 0.51 0.51

6BM8EH
triode



6BM8EH
pentod