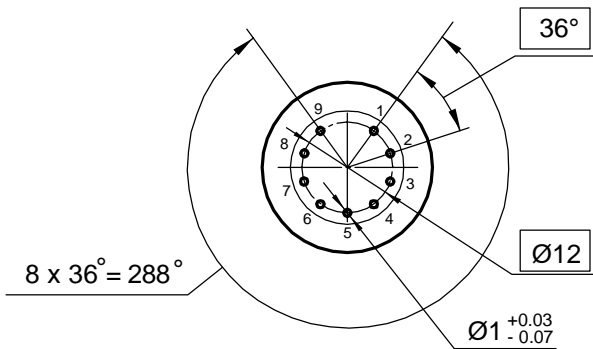


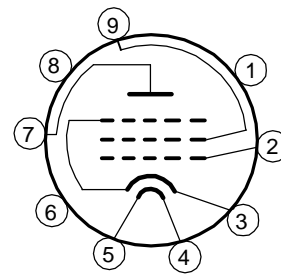
# Mullard EL84/6BQ5

Vacuum tube EL84/6BQ5 is a miniature pentode with equipotential cathodes, designed to amplify low frequency power amplification in the output stages of HI-FI audio.

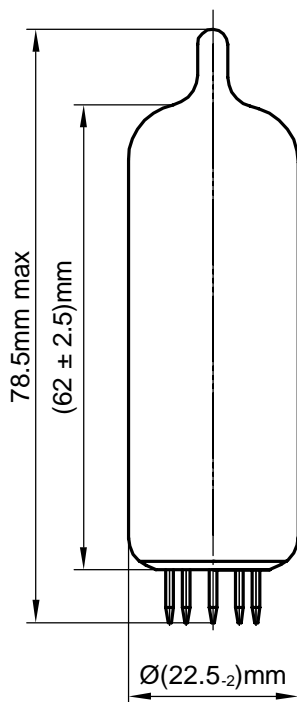
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1, 6, 8	Free
2	Grid 1
3	Cathode, Grid 3
4, 5	Heater
7	Plate
9	Grid 2

## Electrical parameters

Mullard EL84/6BQ5

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, $\mu\text{A}$ (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, first grid circuit resistance 0.51M $\Omega$ )	—	1.0
Heater current, mA	700	840
Plate current, mA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	30	60
Second grid current, mA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	—	8.5
Output power, W (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, plate circuit resistance 5.2 k $\Omega$ alternating first grid, efficacious 5.2 V)	3.0	—
Output power at low voltage, W (at: filament voltage 5.7 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, plate circuit resistance 5.2 k $\Omega$ first grid alternating voltage, efficacious 5.2 V)	2.0	—
Slope of characteristic, mA/V (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	9.0	—
Distortion factor, %	—	17
Cahtode - heater insulation resistance, M $\Omega$ (at: filament voltage 6.3 V cathode -heater voltage $\pm 100$ V)	5.0	—

## Maximum permissible operating conditions

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	7.0
Plate voltage, V	—	300
Second grid voltage, V	—	300
Cathode - heater voltage, V	—	100
Cathode current, mA	—	65
Power dissipation at the plate, W	—	14
Power dissipation at the second grin, W	—	2.2
First grid circuit resistance for each, M $\Omega$ self - bias	—	1.0
fixed bias	—	0.51
Temperature at the most heated part of the envelope, K	—	493