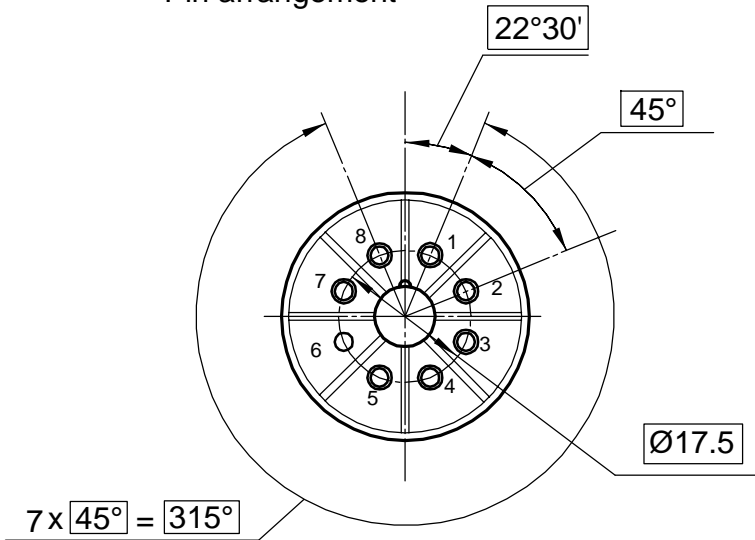
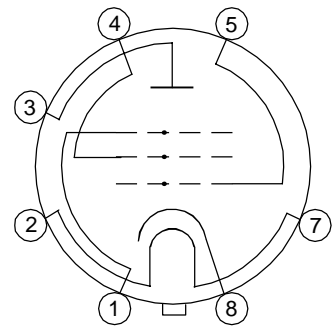


Vacuum tube EL34 Mullard is a output pentod in the glass bulb, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

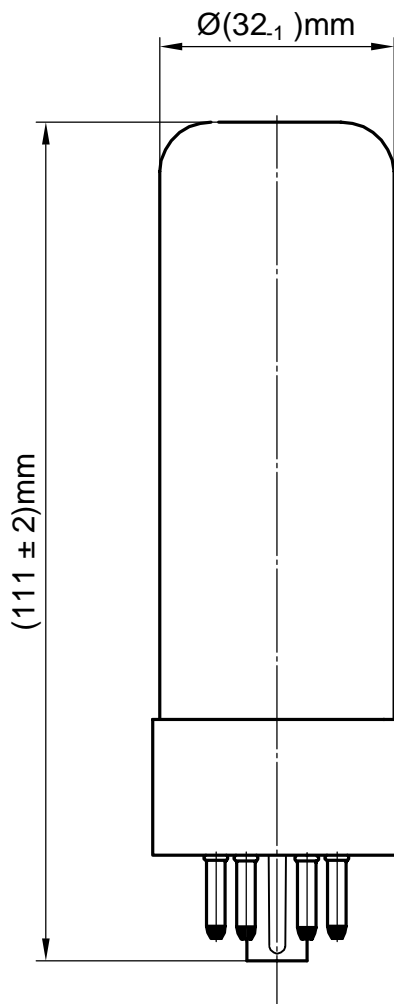
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



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

## Electrical parameters

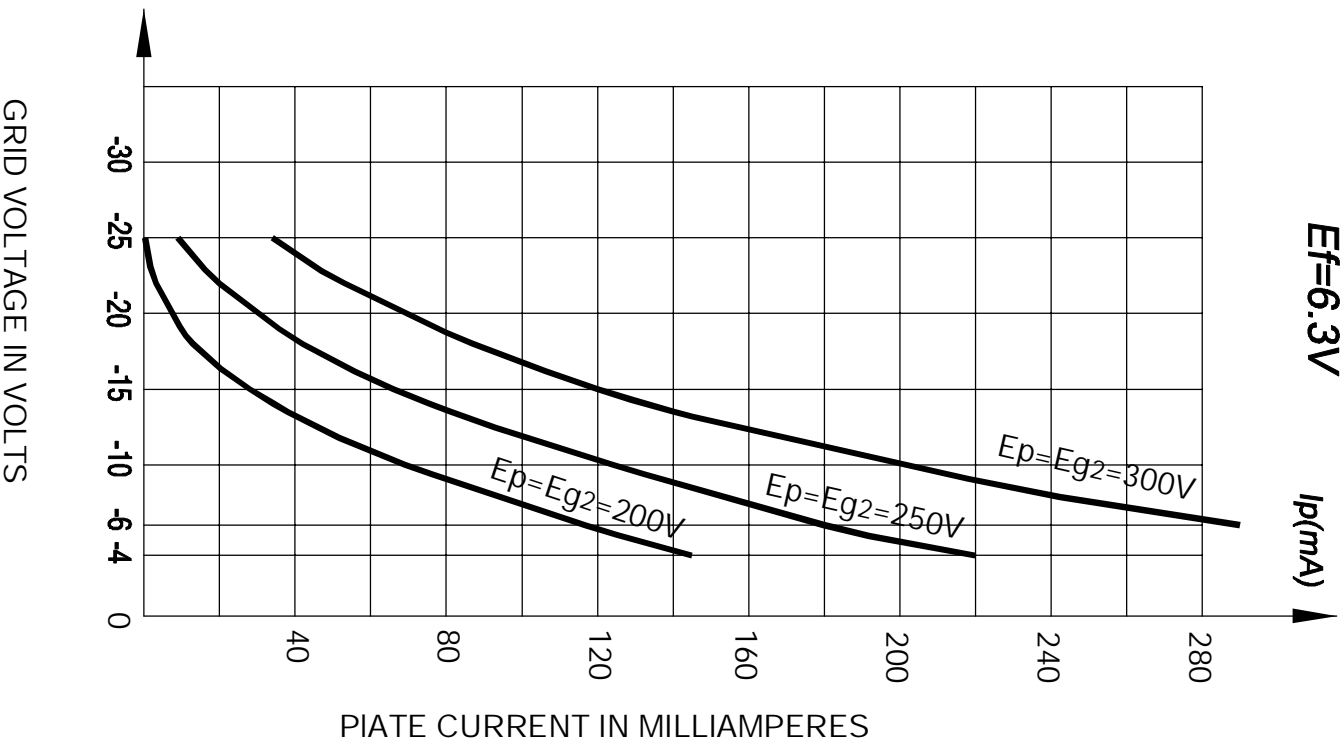
Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, $\mu\text{A}$ (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 13.5 V, second grid voltage 265 V, first grid circuit resistance 0.51 M $\Omega$ )	—	1.5
Heater current, A	1.35	1.65
Plate current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 13.5 V, second grid voltage 265 V )	80	120
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 13.5 V, second grid voltage 265 V )	10	20
Output power, W (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 13.5 V, second grid voltage 265 V, plate circuit resistance 2.0 k $\Omega$ , first grid alternating voltage, efficacious 8.7 V )	8.5	—
First grid cut-off voltage, negative, V (at: filament voltage 6.3 V, plate voltage 250 V, second grid voltage 265 V )	—	- 48
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 250 V, first grid voltage minus 13.5 V, second grid voltage 265 V )	9.5	15
Distortion factor,% (at: filament voltage 6.3 V, plate voltage 265 V, first grid voltage minus 13.5 V, second grid voltage 265 V, plate circuit resistance 2.0 k $\Omega$ , first grid alternating voltage, efficacious 8.7 V )	—	13.5
Cahtode - heater insulation resistance, M $\Omega$ (at: filament voltage 6.3 V cathode -heater voltage $\pm$ 100 V)	2	—

## Operating conditions limit

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.5	7.0
Cathode - heater voltage, V	—	$\pm$ 100
Cathode current, mA	—	150
Power dissipation at the plate, W	—	25
Power dissipation at the second grin, W	—	8
First grid circuit resistance for each, M $\Omega$ fixed bias	—	0.5
self - bias	—	0.7
Temperature at the most heated part of the envelope, K $^{\circ}$	—	523

EL34 Mullard

$I_p = f(E_{g1})$   
 $E_f = 6.3V$



$I_p = f(E_p)$   
 $E_f = 6.3V, E_{g2} = 250V$

