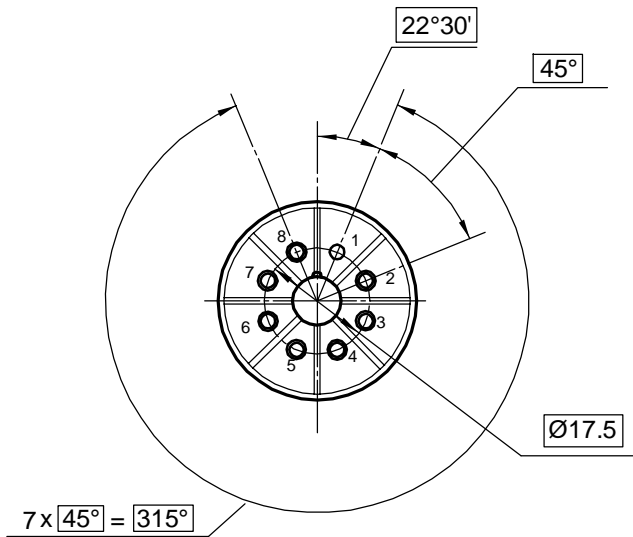
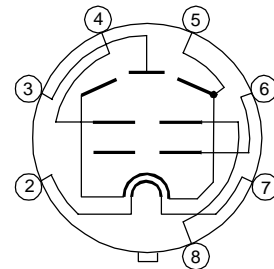


Vacuum tube 7591A Tung - Sol is a beam tetrode in the glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

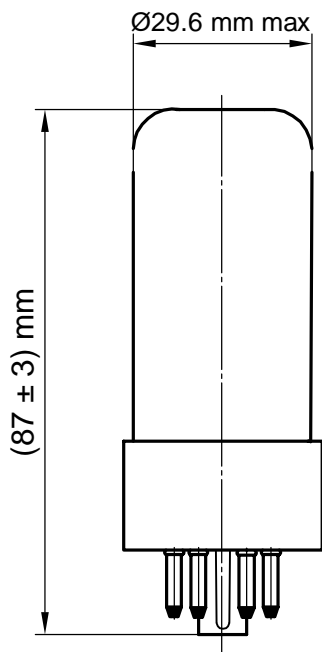
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



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

Electrical parameters

7591A Tung - Sol

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V, plate voltage 300 V, first grid voltage minus 10.0 V, second grid voltage 300 V, first grid circuit resistance 0.3M Ω)	—	0.7
Heater current, A	0.7	0.9
Plate current, mA (at: filament voltage 6.3 V, plate voltage 300 V, first grid voltage minus 10.0 V, second grid voltage 300 V)	50	80
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 300 V, first grid voltage minus 10.0 V, second grid voltage 300 V)	—	10
Output power, W (at: filament voltage 6.3 V, plate voltage 300 V, first grid voltage minus 10.0 V, second grid voltage 300 V, plate circuit resistance 3.0 k Ω first grid alternating voltage, efficacious 7.1 V)	7.0	—
First grid cut-off voltage, negative, V (at: filament voltage 6.3 V, plate voltage 300 V, second grid voltage 300 V,)	—	38
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 300 V, first grid voltage minus 10.0 V, second grid voltage 300 V)	8.4	11.4
Distortion factor, % (at: filament voltage 6.3 V, plate voltage 300 V, first grid voltage minus 10 V, second grid voltage 300 V, plate circuit resistance 3.0 kΩ, first grid alternating voltage, efficacious 7.1 V)	—	17.0
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage ± 200 V)	6.6	—

Operating conditions limits.

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	7.0
Cathode - heater voltage, V	—	± 200
Cathode current, mA	—	90
Power dissipation at the plate, W	—	19
Power dissipation at the second grid, W	—	3.3
First grid circuit resistance ,M Ω		
fixed bias	—	0.3
self - bias	—	1.0
Temperature at the most heated part of the envelope, K $^{\circ}$	—	513

