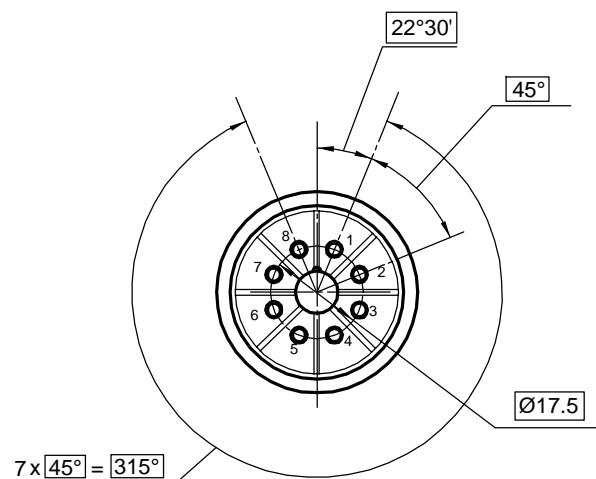
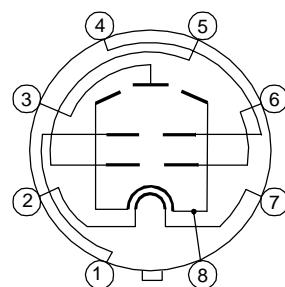


Vacuum tube 7027A Tung - Sol is a beam tetrode in the glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

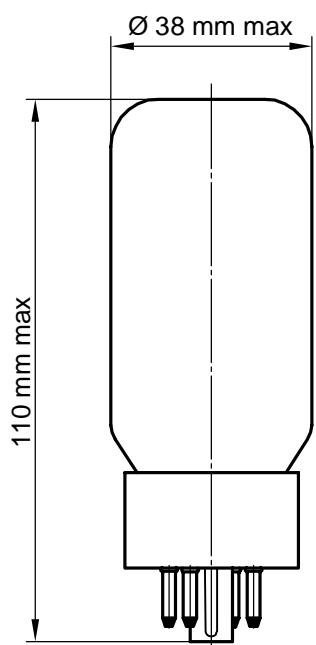
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



| Lead designation | Name of electrode            |
|------------------|------------------------------|
| 1, 4             | Grid 2                       |
| 2, 7             | Heater                       |
| 3                | Plate                        |
| 5, 6             | Grid 1                       |
| 8                | Cathode, beam-forming screen |

# Electrical parameters

7027A Tung - Sol

| Parameters, conditions and units   | Nominal |      |
|--|---------|------|
|  | min     | max  |
| First grid reverse current, $\mu$ A (at: filament voltage 6.3 V, plate voltage 350 V, first grid voltage minus 18.0 V, second grid voltage 250 V, first grid circuit resistance 0.1M $\Omega$ )                                | —       | 0.7  |
| Heater current, A  | 0.845   | 1.06 |
| Plate current, mA (at: filament voltage 6.3 V, plate voltage 350 V, first grid voltage minus 18.0 V, second grid voltage 250 V )   | 42      | 72   |
| Second grid current, mA (at: filament voltage 6.3 V, plate voltage 350 V, first grid voltage minus 18.0 V, second grid voltage 250 V )   | —       | 6.0  |
| Output power, W (at: filament voltage 6.3 V, plate voltage 350 V, first grid voltage minus 18.0 V, second grid voltage 250 V, plate circuit resistance 4.2 k $\Omega$ first grid alternating voltage, efficacious 12.7 V )     | 8       | —    |
| First grid cut-off voltage, negative, V<br>(at: filament voltage 6.3 V, plate voltage 350 V, second grid voltage 250 V, )  | —       | 60   |
| Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 350 V, first grid voltage minus 18.0 V, second grid voltage 250 V )   | 4.2     | 7.0  |
| Distortion factor, % (at: filament voltage 6.3 V, plate voltage 350 V, first grid voltage minus 18 V, second grid voltage 250 V, plate circuit resistance 4.2 k $\Omega$ , first grid alternating voltage, efficacious 12.7 V) | —       | 15.0 |
| Cathode - heater insulation resistance, M $\Omega$<br>(at: filament voltage 6.3 V, cathode -heater voltage $\pm$ 100 V)  | 2.0     | —    |

## Operating conditions limits.

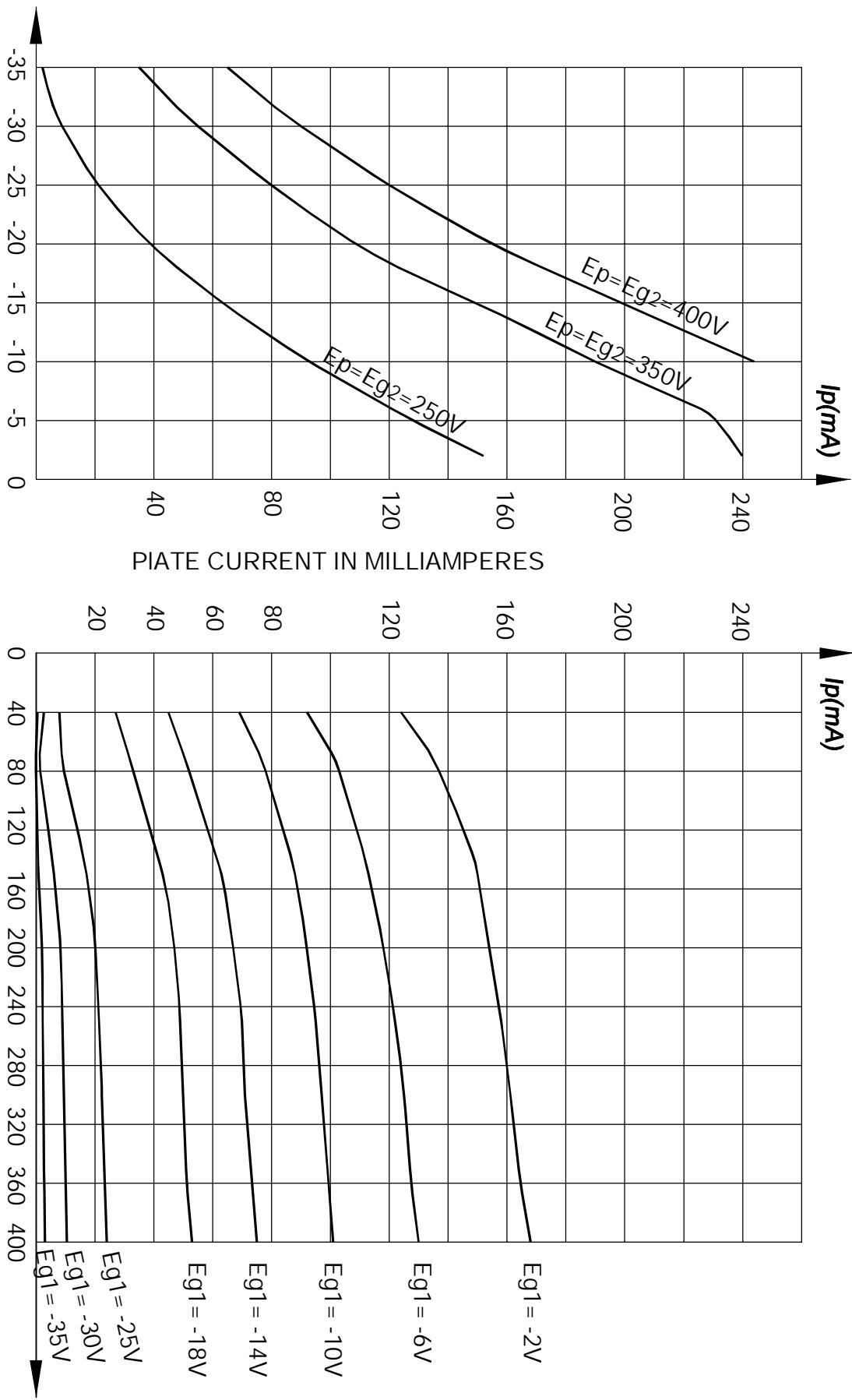
| Parameters, units  | Nominal |             |
|--|---------|-------------|
|  | min     | max         |
| Filament voltage, V  | 5.7     | 6.9         |
| Cathode - heater voltage, V  | —       | $\pm$ 200   |
| Cathode current, mA  | —       | 100         |
| First grid voltage, negative, V  | —       | 100         |
| Power dissipation at the plate, W                                      | —       | 35          |
| Power dissipation at the second grid, W                                | —       | 5           |
| First grid circuit resistance ,M $\Omega$<br>fixed bias<br>self - bias | —       | 0.1<br>0.51 |
| Temperature at the most heated part of the envelope, K°                | —       | 523         |

$I_p = f(Eg_1)$

$E_f = 6.3V$

$I_p = f(E_p)$

$E_f = 6.3V, Eg_2 = 250V$



GRID VOLTAGE IN VOLTS

PLATE VOLTAGE IN VOLTS