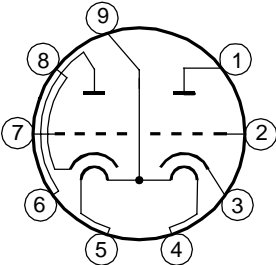
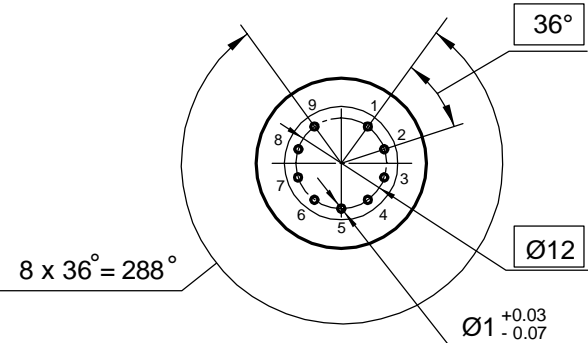


# 12AU7A/ECC82EH gold

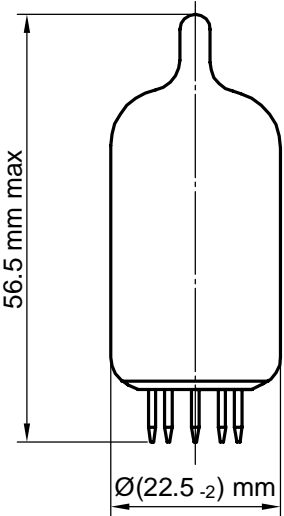
Vacuum tube 12AU7A/ECC82EH gold is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

Pin arrangement

Electrode -to - lead connection diagram



Dimensions



| Lead designation | Name of electrode     |
|------------------|-----------------------|
| 1                | Second triode plate   |
| 2                | Second triode grid    |
| 3                | Second triode cathode |
| 4, 5, 9          | Heater                |
| 6                | First triode plate    |
| 7                | First triode grid     |
| 8                | First triode cathode  |

## Electrical parameters

12AU7A/ECC82EH  
gold

| Parameters, conditions and units  | Nominal    |            |
|---|------------|------------|
|   | min        | max        |
| Heater current, mA<br>at: filament voltage 6.3 V<br>at: filament voltage 12.6 V   | 300<br>150 | 350<br>175 |
| Grid reverse current, $\mu\text{A}$ , ( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 8.5 V,<br>resistance in grid circuit 0.25 M $\Omega$ ) | —          | 0.2        |
| Plate current, mA, ( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 8.5 V )   | 7.5        | 13.5       |
| First and second triodes plate current difference, %<br>( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 8.5 V )                              | —          | $\pm 40$   |
| Slope of characteristic, mA/V ( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 8.5 V )  | 1.7        | 3.0        |
| Amplification factor ( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 8.5 V )   | 13         | —          |
| Cathode - heater insulation resistance, M $\Omega$<br>( at: filament voltage 6.3 V or 12.6 V,<br>cathode - heater voltage $\pm 200$ V )   | 20         | —          |
| Plate current at the beginning of the characteristic, $\mu\text{A}$<br>( at: filament voltage 6.3 V or 12.6 V,<br>plate voltage 250 V, grid voltage minus 25.0 V )              | —          | 100        |

## Limiting Values

| Parameters, units  | Nominal |             |
|--|---------|-------------|
|  | min     | max         |
| Filament voltage, V<br>for parallel connection<br>for series connection                  | 6<br>12 | 6.6<br>13.2 |
| Plate voltage, V   | —       | 300         |
| Cathode - heater voltage, V  | —       | $\pm 200$   |
| Power dissipation at the plate of each triode, W   | —       | 2.75        |
| Cathode current, mA  | —       | 22          |
| Grid circuit resistance for each of the triodes, M $\Omega$<br>fixed bias<br>self - bias | —<br>—  | 0.25<br>1.0 |

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