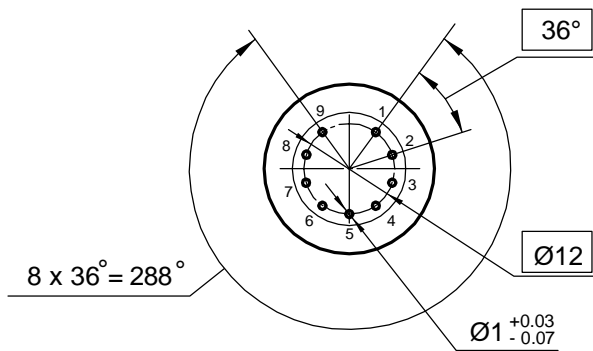
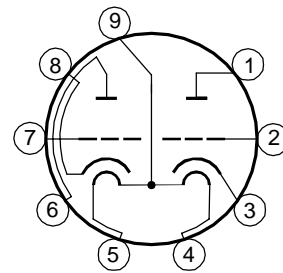


Vacuum tube 12AX7 Tung-Sol is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

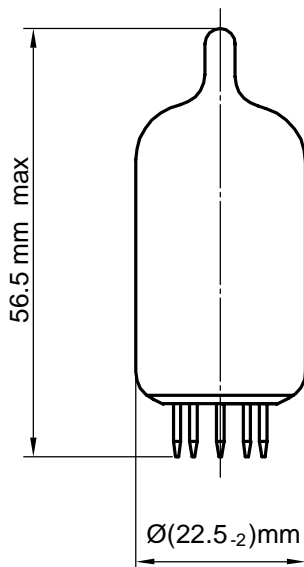
Pin arrangement



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

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA at: filament voltage 6.3 V at: filament voltage 12.6 V	320 160	365 183
Grid reverse current, $\mu\text{A}$ , ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V, resistance in grid circuit 1.0 M $\Omega$ )	—	0.2
Plate current, mA, ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V )	0.75	2.1
First and second triodes plate current difference, % ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V )	—	$\pm 40$
Plate current at the beginning of the characteristic, $\mu\text{A}$ ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 4.5 V )	—	30
Slope of characteristic, mA/V ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V )	1.4	—
Amplification factor ( at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V )	83	—
Cathode - heater insulation resistance, M $\Omega$ ( at: filament voltage 6.3 V or 12.6 V, cathode -heater voltage $\pm 200$ V )	20	—

## Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V for parallel connection for series connection	6 12	6.6 13.2
Plate voltage, V	—	330
Cathode - heater voltage, V	—	$\pm 200$
Cathode current, mA	—	9
Power dissipation at the plate of each triode, W	—	1.2
Grid circuit resistance for each of the triodes, M $\Omega$ fixed bias self - bias	— —	1.0 2.2

