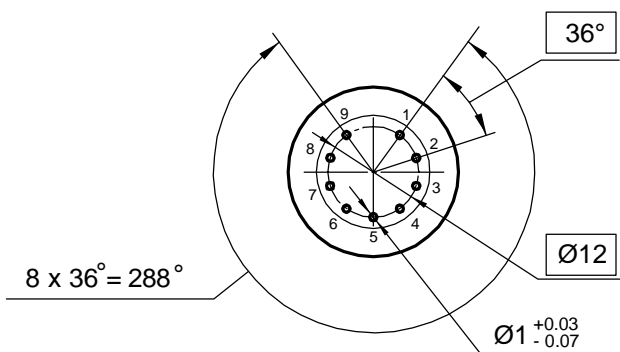
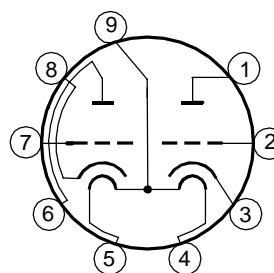


Vacuum tube 12AX7WC is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

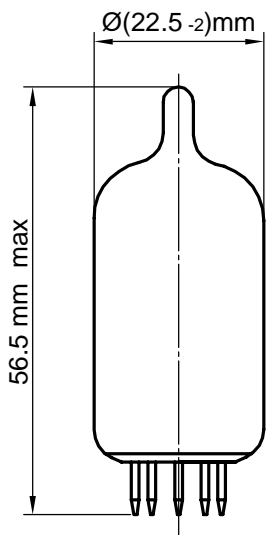
Pin arrangement



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

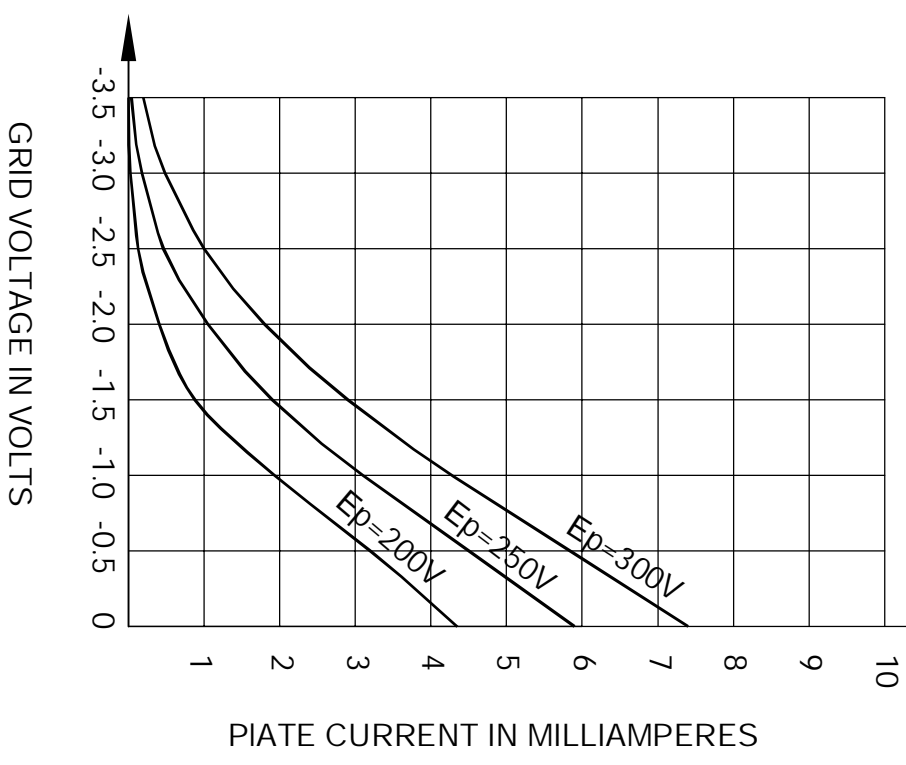
Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA at: filament voltage 6.3 V at: filament voltage 12.6 V	300 150	340 170
Grid reverse current, μA , (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 Ω)	—	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	2.0
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)	—	± 40
Plate current at the beginning of the characteristic, μA (at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 5.5 V)	—	20
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)	1.1	—
Amplification factor (at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 2.0 V)	82	110
Cathode - heater insulation resistance, M Ω (at: filament voltage 6.3 V or 12.6 V, cathode -heater voltage ± 200 V)	20	—

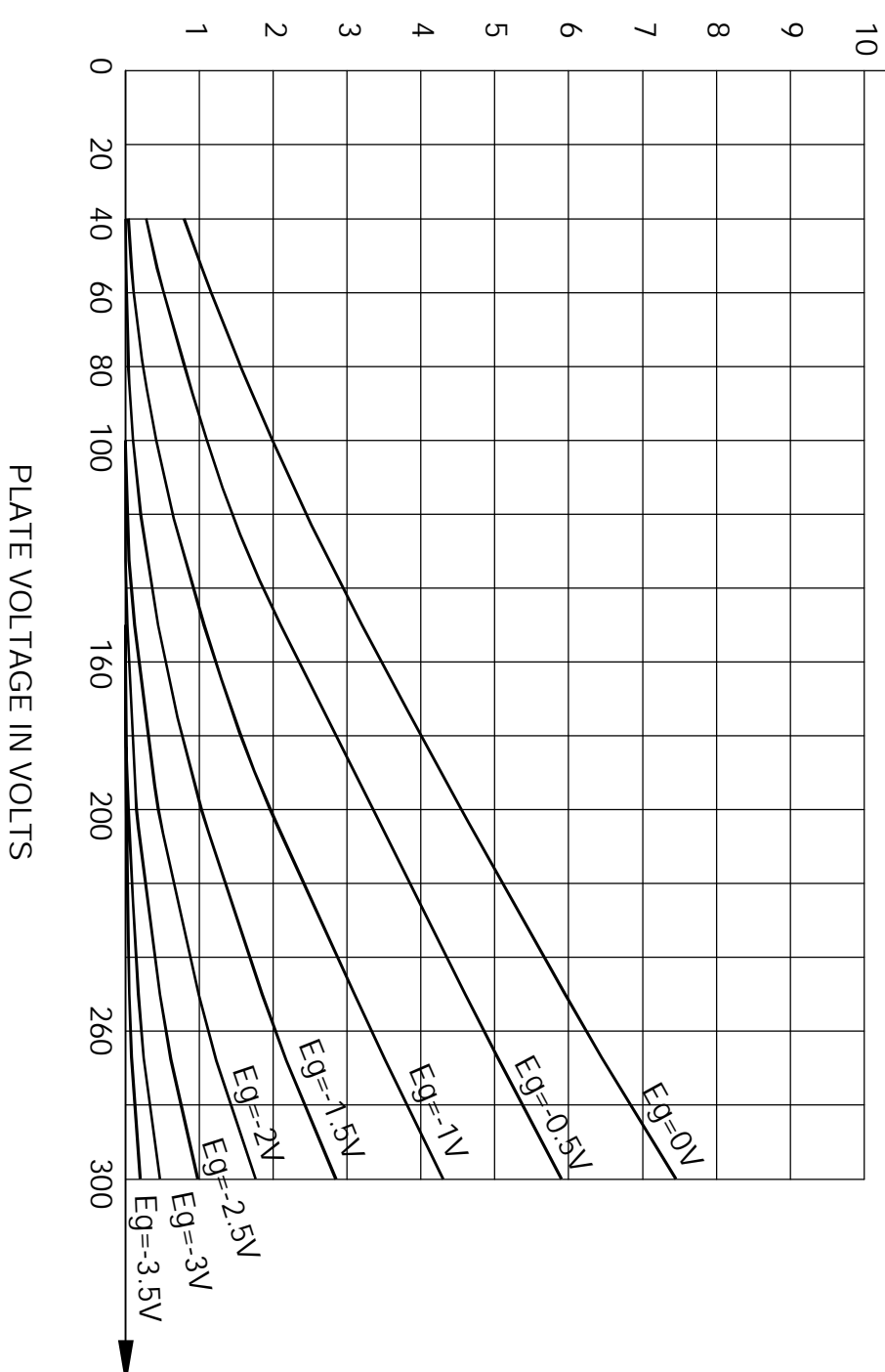
Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V for parallel connection for series connection	6 12	6.6 13.2
Plate voltage, V	—	300
Cathode - heater voltage, V	—	± 200
Cathode current, mA	—	10
Power dissipation at the plate of each triode, W	—	1.0
Grid circuit resistance for each of the triodes, M Ω fixed bias self - bias	— —	1.0 2.2
Temperature at the most heated part of the envelope, K $^{\circ}$	—	368

$I_p = f(E_g)$
 $E_f = 6.3V$



$I_p = f(E_p)$
 $E_f = 6.3V$



GRID VOLTAGE IN VOLTS

PLATE CURRENT IN MILLIAMPERES

PLATE VOLTAGE IN VOLTS