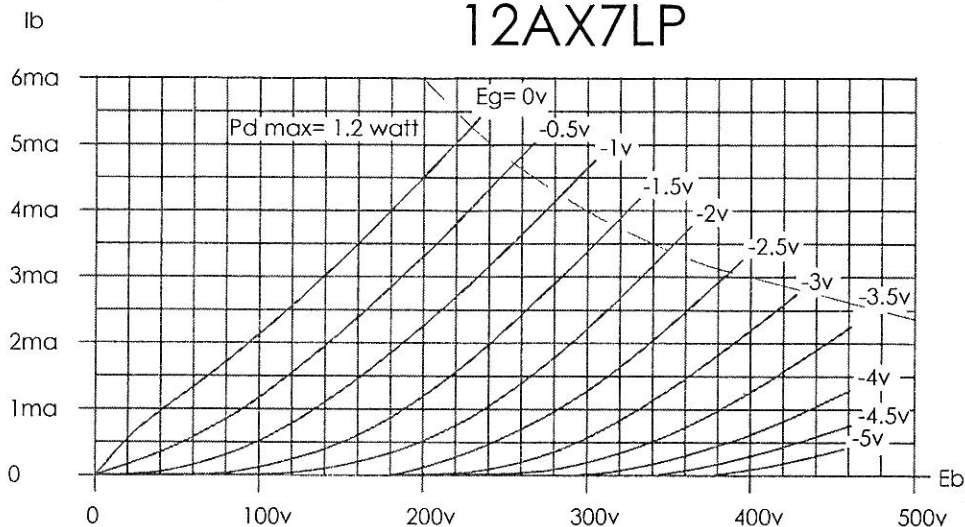
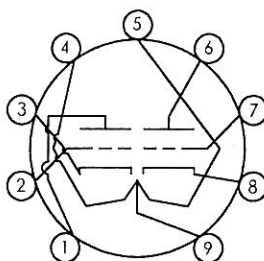


SOVTEK

12AX7LP



The 12AX7LP is a high μ dual triode with excellent linearity, making it a superior 12AX7 replacement.



Pin #	description
1	plate 2
2	grid 2
3	cathode 2
4,5,9	heater
6	plate 1
7	grid 1
8	cathode 1

Electrical Data	
Heater Voltage, not less than	6.0 or 12.0 V
Heater Voltage, not more than	6.6 or 13.2 V
Plate Voltage, not more than	330 V
Heater to Cathode Voltage:	
positive, V not more than	200 V
negative, V not less than	200 V
Plate Current, not more than	9 mA
Plate Dissipation, each triode, not more than	1.2 watts
Maximum grid circuit resistance:	
fixed bias, not more than	1 Mohm
self bias, not more than	2.2 Mohm
Amplification Factor (nominal)	94
Transconductance (nominal)	1.7 mA/V
Plate Resistance (nominal)	56.0 K OHM
Inter-electrode Capacitances:	
C, grid to plate	1.7 pF (triode 1 and 2)
C, grid to cathode and heater	1.6 pF (triode 1 and 2)
C, plate to cathode and heater	0.46 pF (1) and 0.38 (2)
C, cathode to heater	5.0 nF (nominal)
C, plate to plate	600 pF
Measured Electrical minima:	
Grid reverse current, not more than (see note below)	0.2 μ A
Plate current, not less than (see note below)	0.75 mA
Plate current ($E_b = 250V$, $E_c = -4V$)	10 μ A
Transconductance, not less than (see note below)	1.4 mA/V
Amplification Factor, not less than (see note below)	78

NOTE: heater V, 12.6vac; plate V, 250v; grid bias, -2v; grid circuit resistance, 1K ohm

12AX7LP SOVTEK

NEW SENSOR CORP.

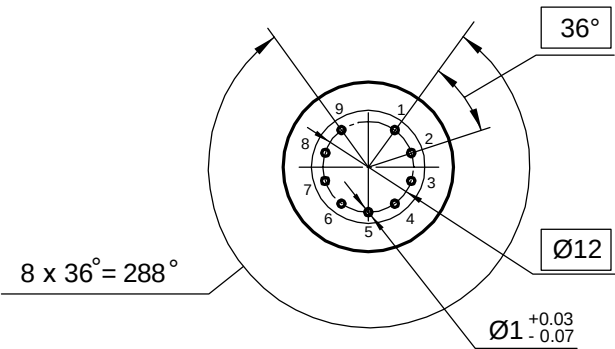
tested by jcm

Drawing #
GT001

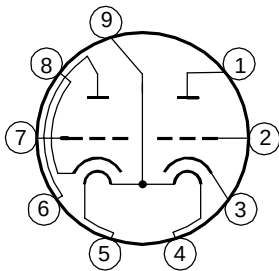
Drawn by:
jcm

Vacuum tube 12AX7WA/7025 is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

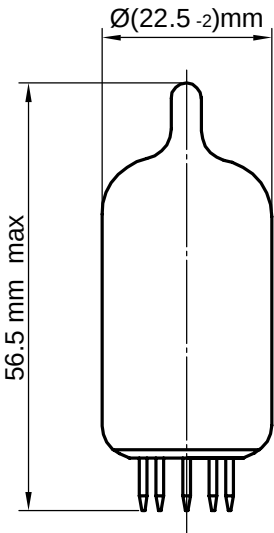
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



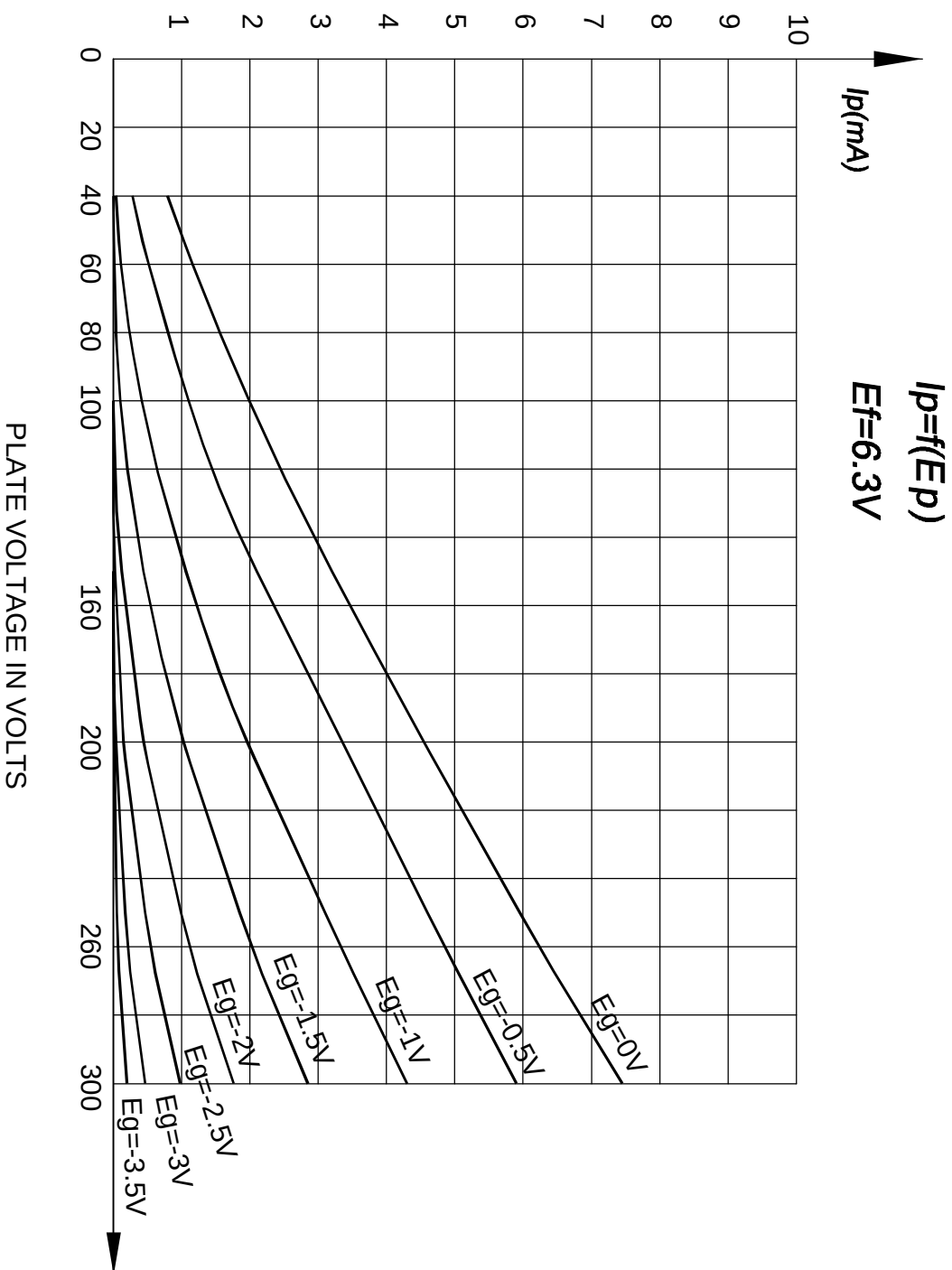
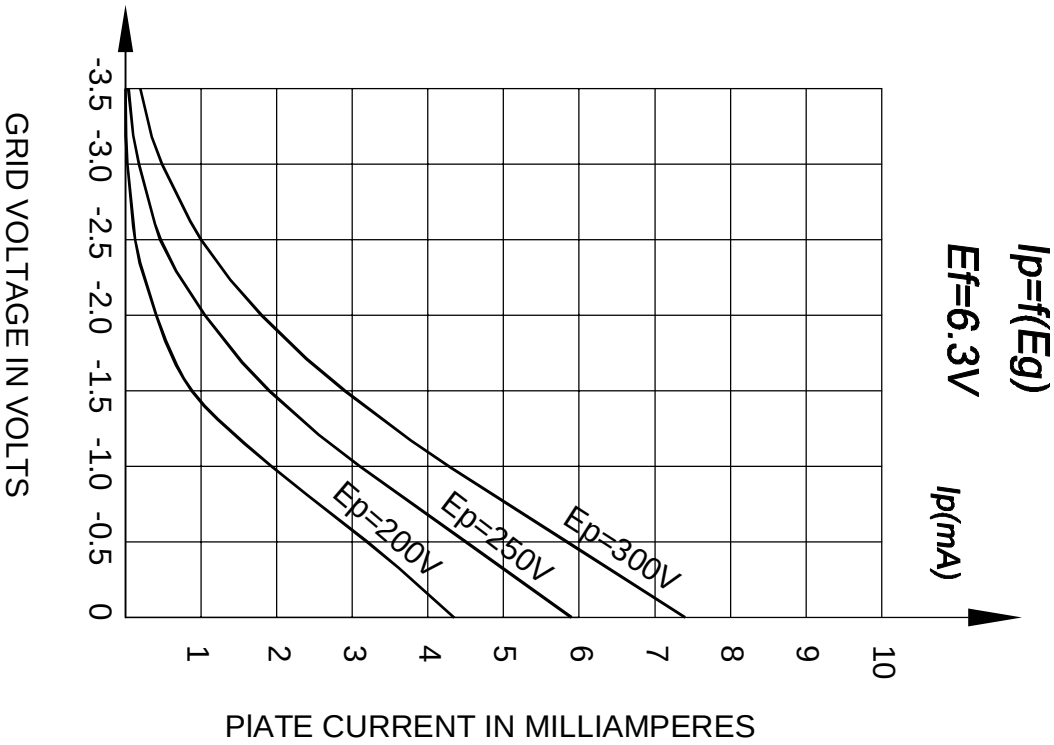
Lead designation	Name of electrode
1	Second triode plate
2	Second triode grid
3	Second triode cathode
4, 5, 9	Heater
6	First triode plate
7	First triode grid
8	First triode cathode

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	—

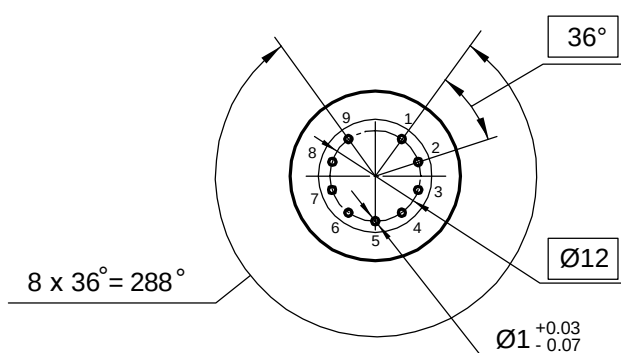
Limiting Values

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°	—	368

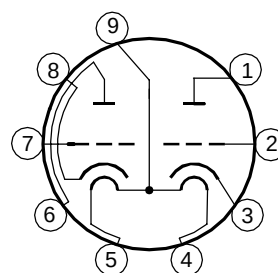


Vacuum tube 12AX7WB/7025 is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

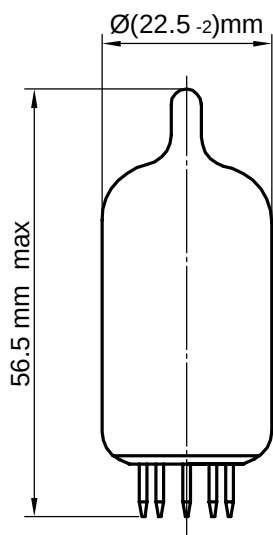
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



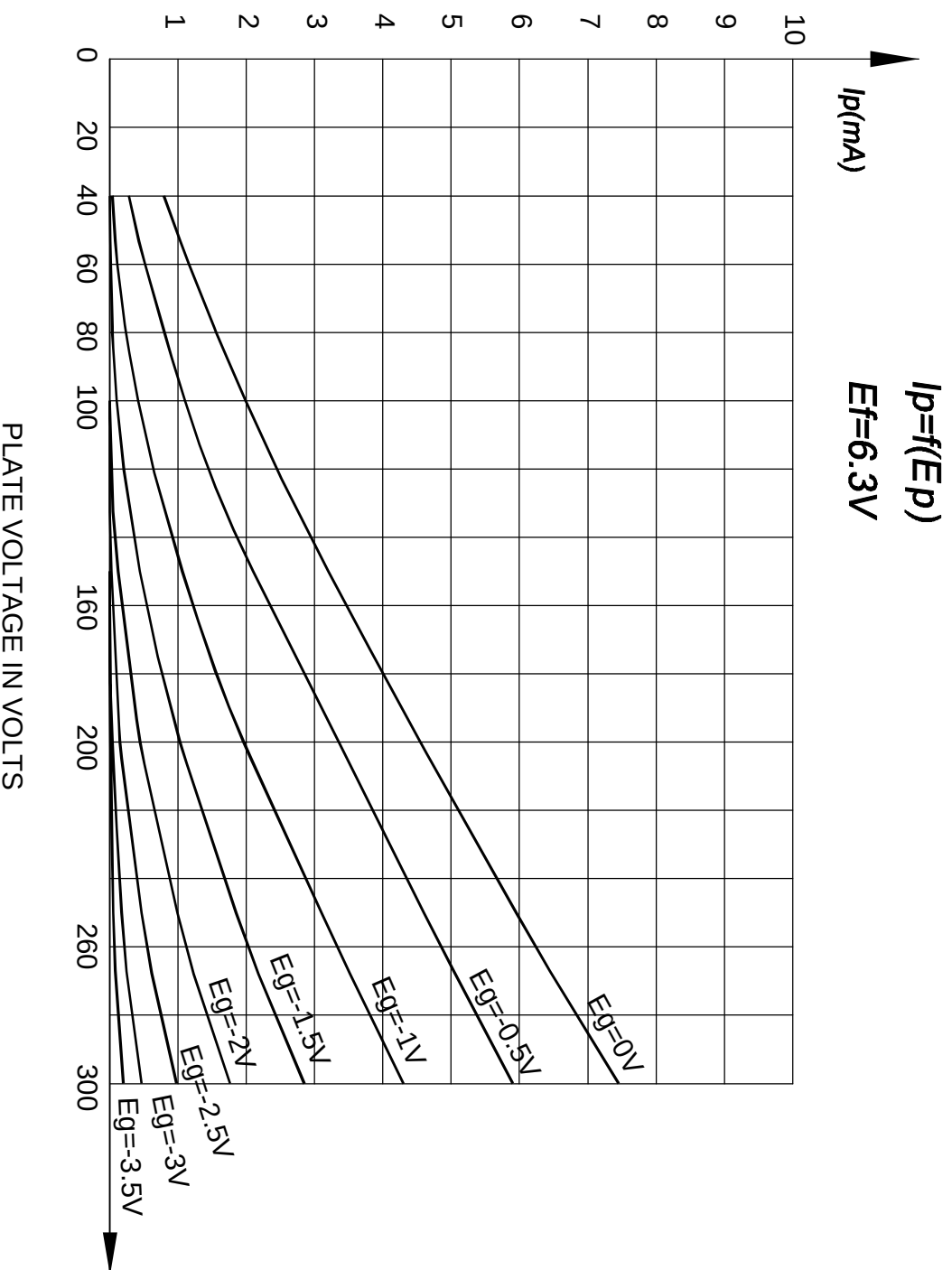
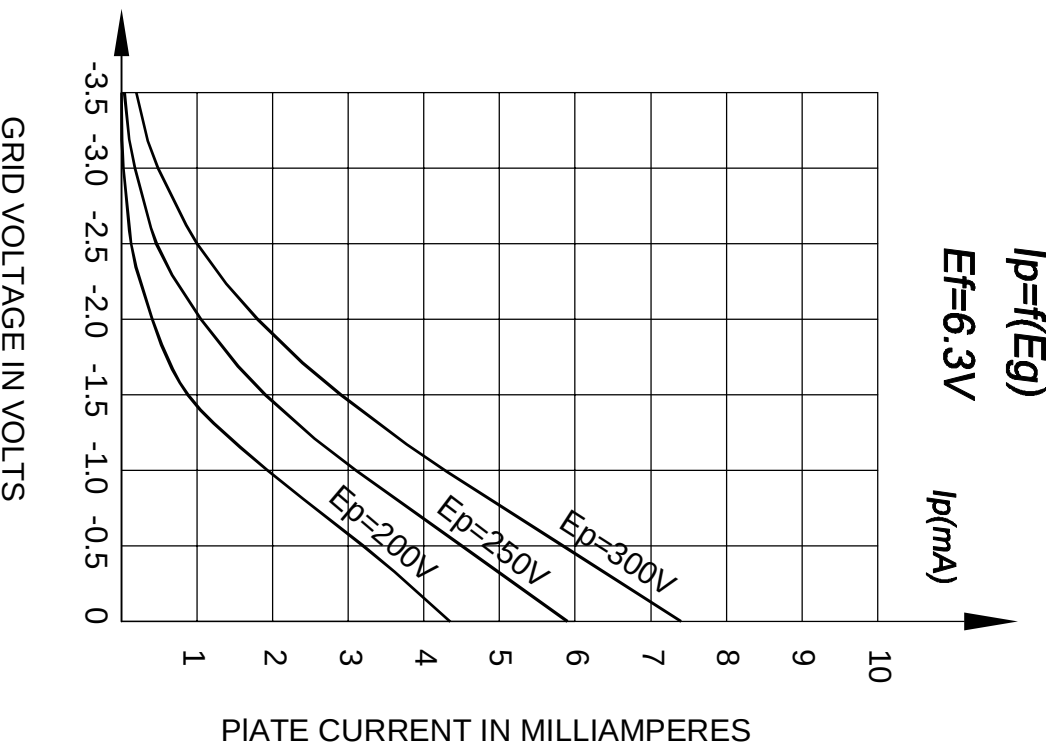
Lead designation	Name of electrode
1	Second triode plate
2	Second triode grid
3	Second triode cathode
4, 5, 9	Heater
6	First triode plate
7	First triode grid
8	First triode cathode

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 1.5 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 1.5 V)	1.2	3.0
First and second triodes plate current difference, % (at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 1.5 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 1.5 V)	1.4	—
Amplification factor (at: filament voltage 6.3 V or 12.6 V, plate voltage 250 V, grid voltage minus 1.5 V)	95	125
Cathode - heater insulation resistance, M Ω (at: filament voltage 6.3 V or 12.6 V, cathode -heater voltage ± 200 V)	20	—

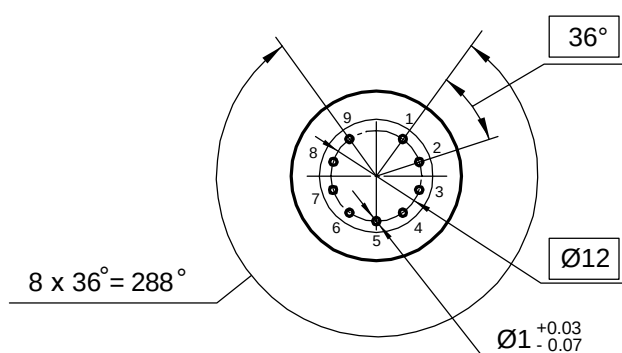
Limiting Values

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°	—	368

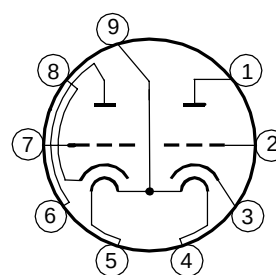


Vacuum tube 12AX7WC is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

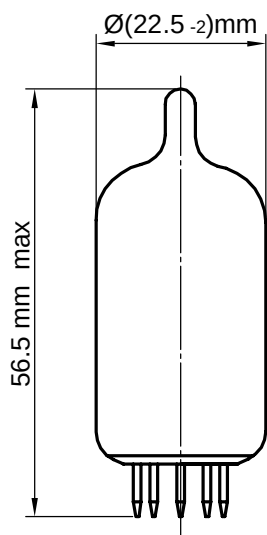
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



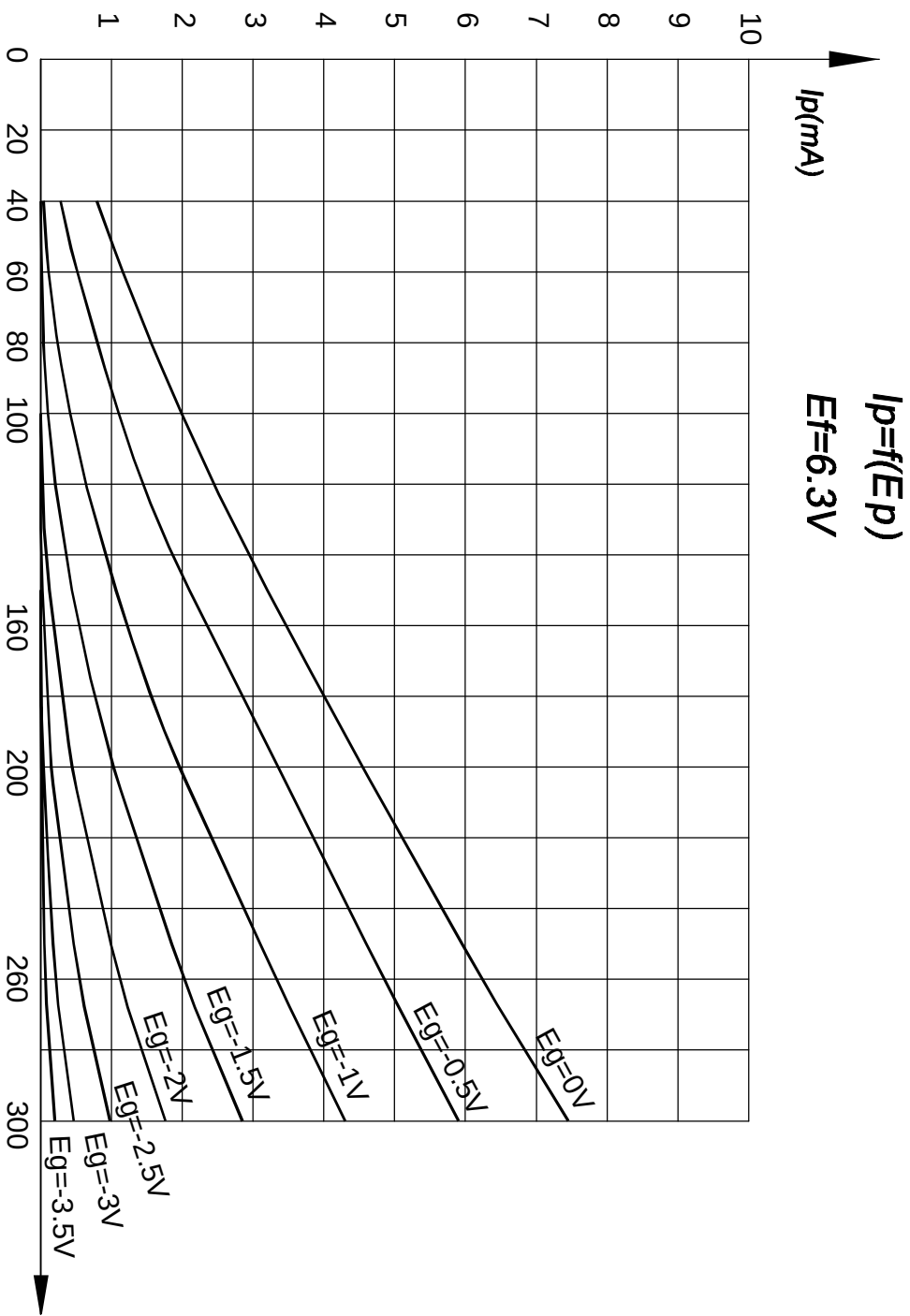
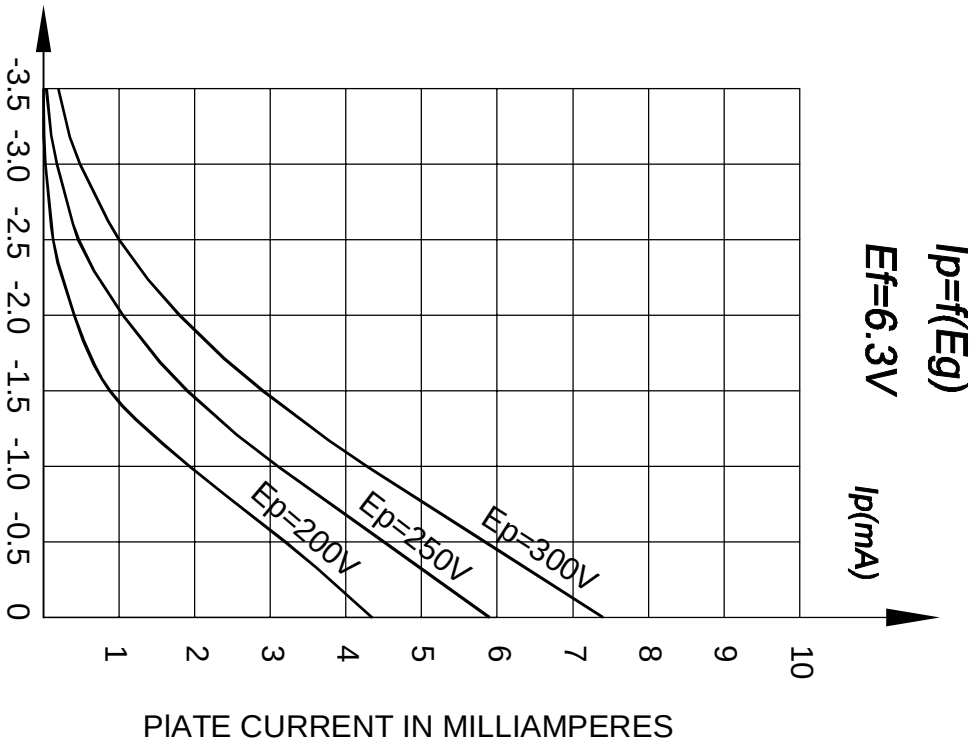
Lead designation	Name of electrode
1	Second triode plate
2	Second triode grid
3	Second triode cathode
4, 5, 9	Heater
6	First triode plate
7	First triode grid
8	First triode cathode

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	—

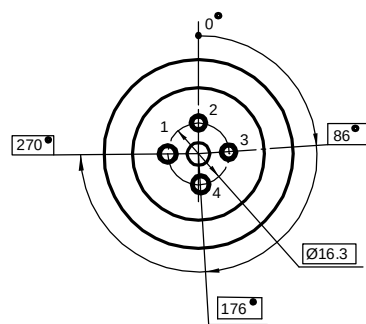
Limiting Values

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°	—	368

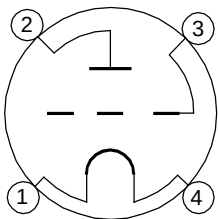


Vacuum tube 2A3 is a triode with coated filament in the glass bulb, designed to amplify low frequency power in radio engineering devices.

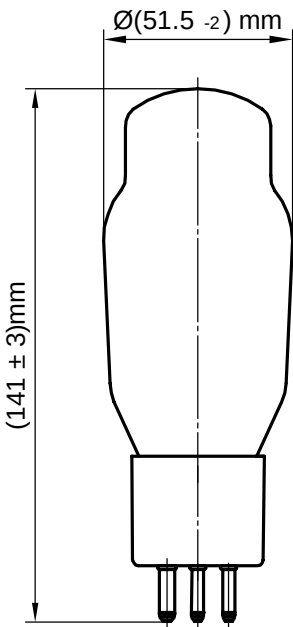
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



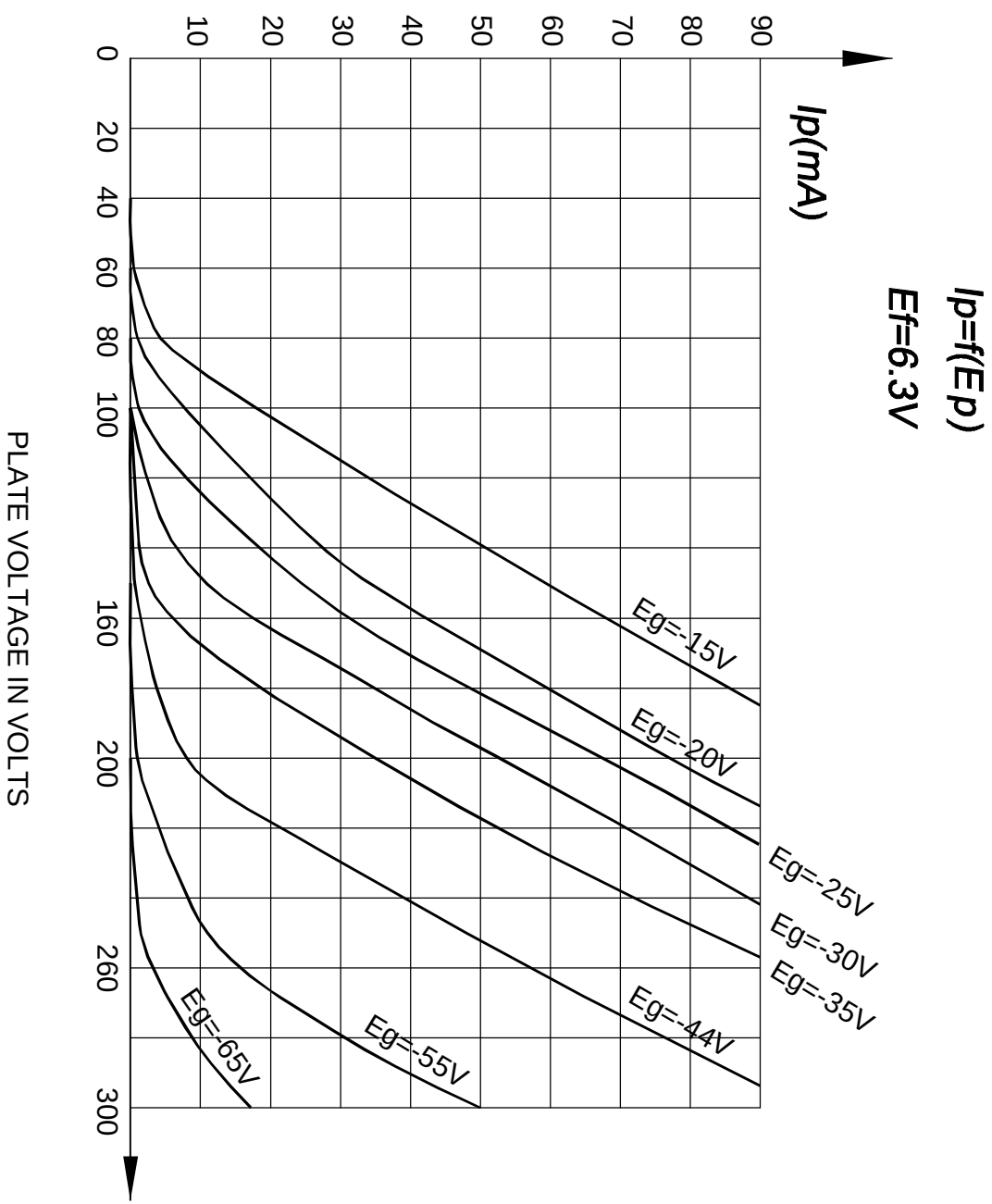
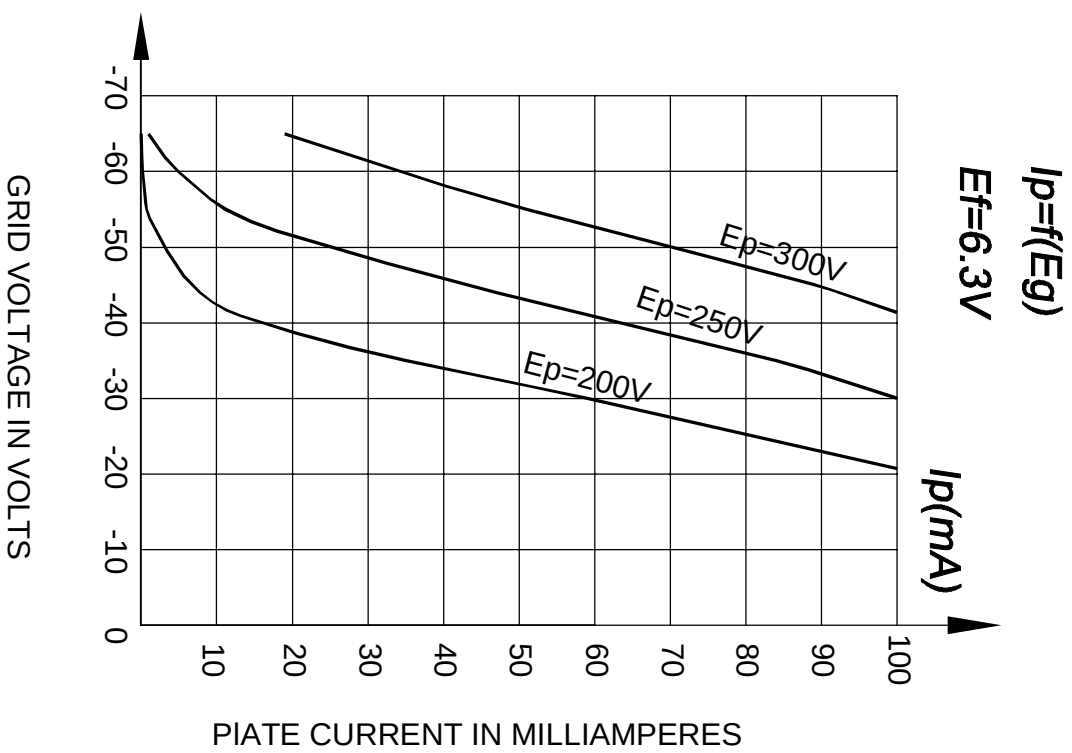
Lead designation	Name of electrode
1, 4	Cathode
2	Plate
3	Grid

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, A	2.3	2.8
Grid reverse current, μA , (at: filament voltage 2.5 V, plate voltage 250 V, grid voltage minus 44 V, resistance in grid circuit 0.51 M Ω)	—	1.0
Plate current, mA, (at: filament voltage 2.5 V, plate voltage 250 V, grid voltage minus 44 V)	40	80
Slope of characteristic, mA/V (at: filament voltage 2.5 V, plate voltage 250 V, grid voltage minus 44 V)	3.8	
Amplification factor (at: filament voltage 2.5 V, plate voltage 250 V, grid voltage minus 44 V)	3.6	4.6
Output power, W (at: filament voltage 2.5 V, plate voltage 250 V, grid voltage minus 44 V, plate circuit resistance 2.5 k Ω , grid alternating voltage, efficacious 31 V)	3.0	—
Grid blanking voltage, V (at: filament voltage 2.5 V, plate voltage 250 V)		126

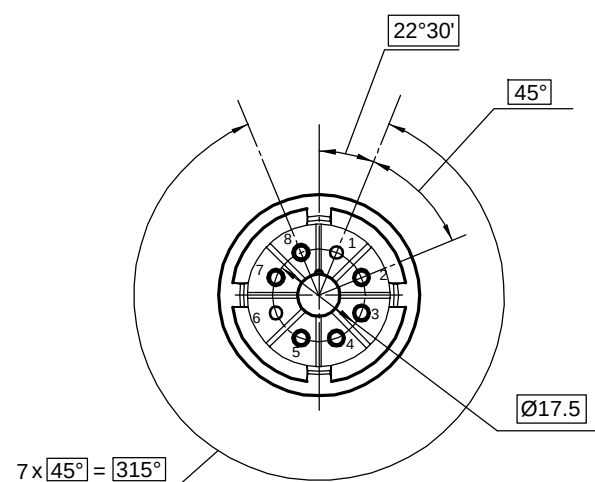
Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	2.25	2.75
Plate voltage, V	—	360
Cathode current, mA	—	100
Power dissipation at the plate of each triode, W	—	17.5
Grid voltage, negative, V	—	150
Grid circuit resistance , M Ω		
fixed bias	—	0.51
self - bias	—	1.0
Temperature at the most heated part of the envelope, K°	—	473

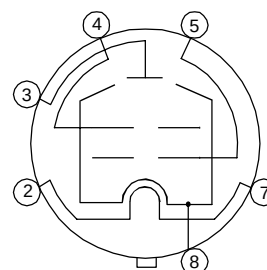


Vacuum tube 5881/6L6WGC is a beam tetrode in the glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

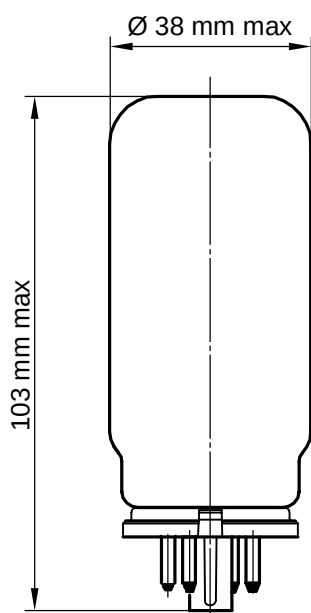
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



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

Electrical parameters

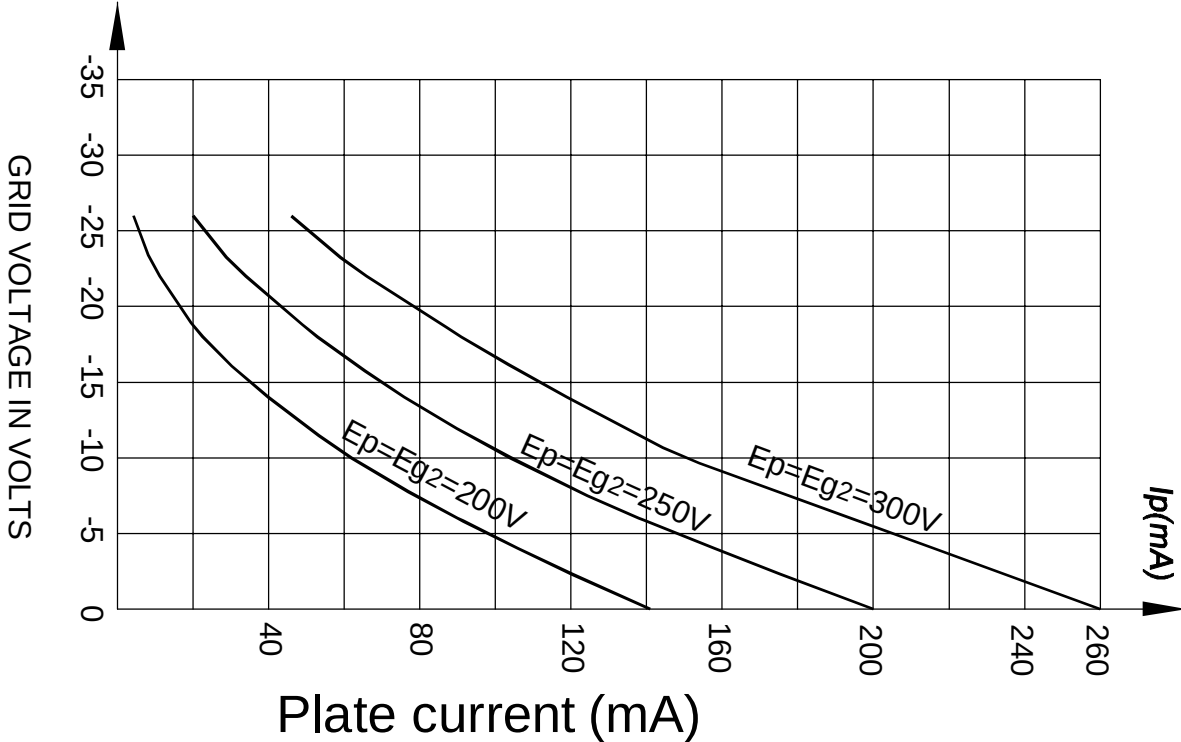
Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V, first grid circuit resistance 0.51M Ω)	—	0.7
Heater current, A	0.840	0.920
Plate current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	60	88
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	—	6.0
Output power, W (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V, plate circuit resistance 2.5 k Ω , first grid alternating voltage, efficacious 9.8 V)	5.8	—
Plate current at the beginning of the characteristic, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 35.0 V, second grid voltage 250 V)	—	10
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	5.2	7.0
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage $\pm$ 250 V)	4.0	—

Operating conditions limit

Parameters, units	Nominal	
	min	max
Filament voltage, V	6.0	6.6
Cathode - heater voltage, V	—	$\pm$ 250
Cathode current, mA	—	90
First grid voltage, negative, V	—	100
Power dissipation at the plate, W	—	20.5
Power dissipation at the second grin, W	—	2
First grid circuit resistance for each, M Ω	—	0.51
Temperature at the most heated part of the envelope, K°	—	453

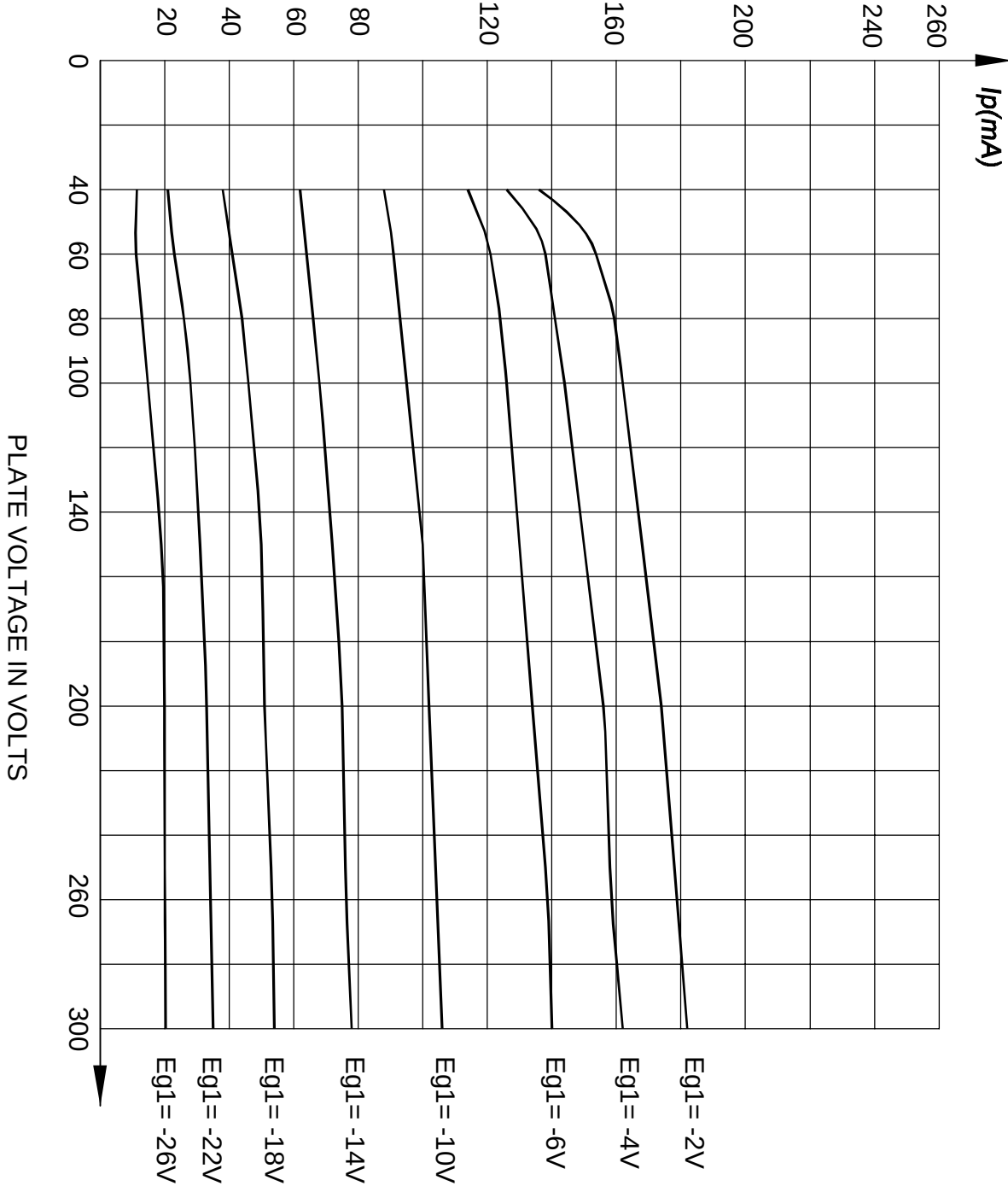
$I_p=f(E_{g1})$

$E_f=6.3V$



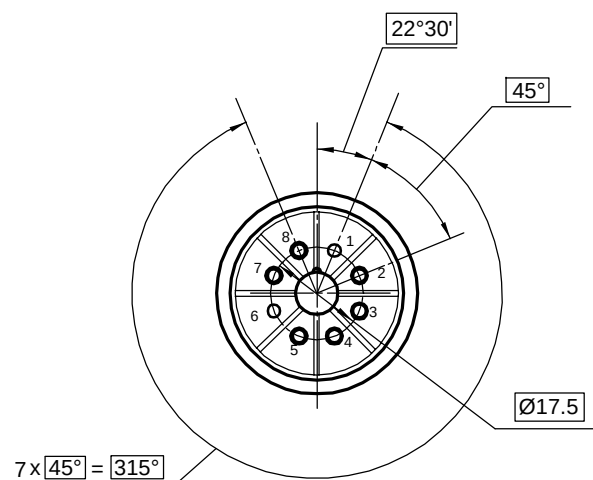
$I_p=f(E_p)$

$E_f=6.3V, E_{g2}=250V$

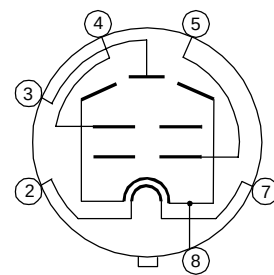


Vacuum tube 5881WXT is a beam tetrode in the glass bulb with octal base, with equipotential cathode, designed to amplify low frequency power in the output stages of HI - FI audio.

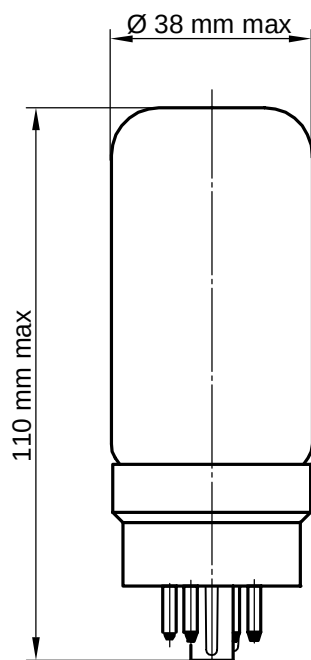
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



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

Electrical parameters

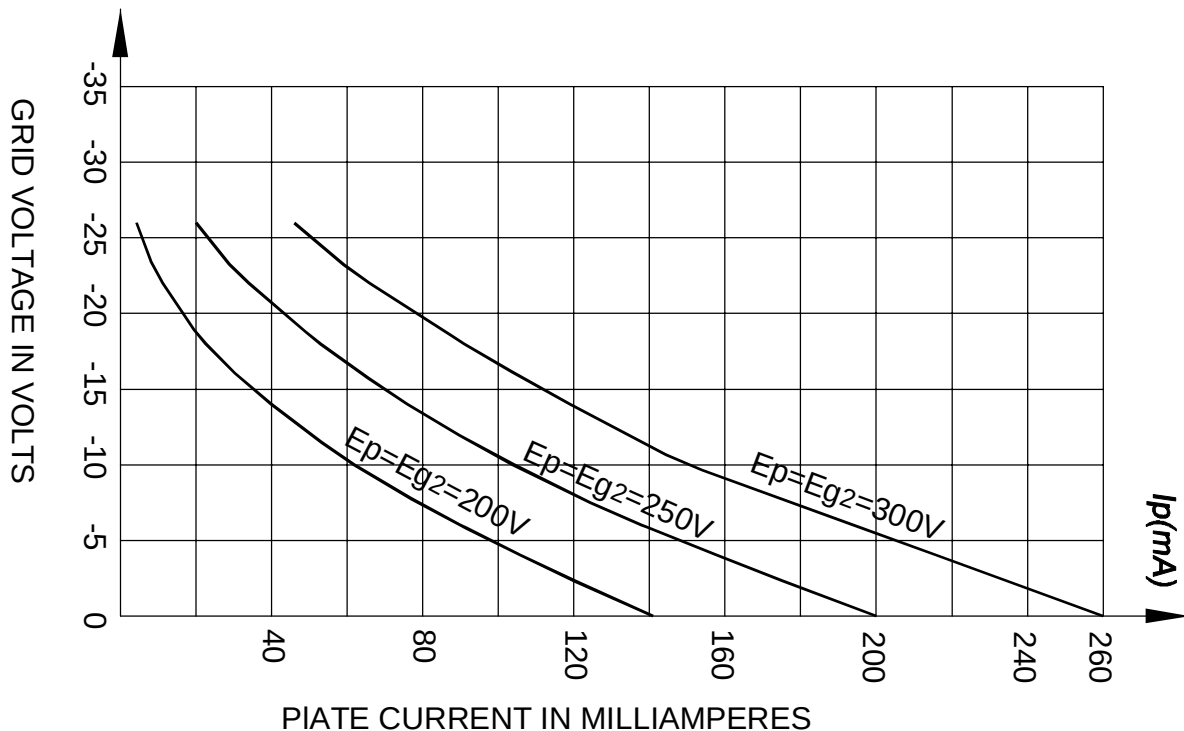
Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V, first grid circuit resistance 0.51M Ω)	—	0.7
Heater current, A	0.840	0.920
Plate current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	60	88
Second grid current, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	—	6.0
Output power, W (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V, plate circuit resistance 2.5 k Ω , first grid alternating voltage, efficacious 9.8 V)	5.8	—
Plate current at the beginning of the characteristic, mA (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 35.0 V, second grid voltage 250 V)	—	10
Slope of characteristic, mA/V (at: filament voltage 6.3 V, anode voltage 250 V, first grid voltage minus 14.0 V, second grid voltage 250 V)	5.2	7.0
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage ± 250 V)	4.0	—

Operating conditions limits

Parameters, units	Nominal	
	min	max
Filament voltage, V	6.0	6.6
Cathode - heater voltage, V	—	± 250
Cathode current, mA	—	90
First grid voltage, negative, V	—	100
Power dissipation at the plate, W	—	20.5
Power dissipation at the second grid, W	—	2
First grid circuit resistance, M Ω	—	0.51
Temperature at the most heated part of the envelope, K°	—	453

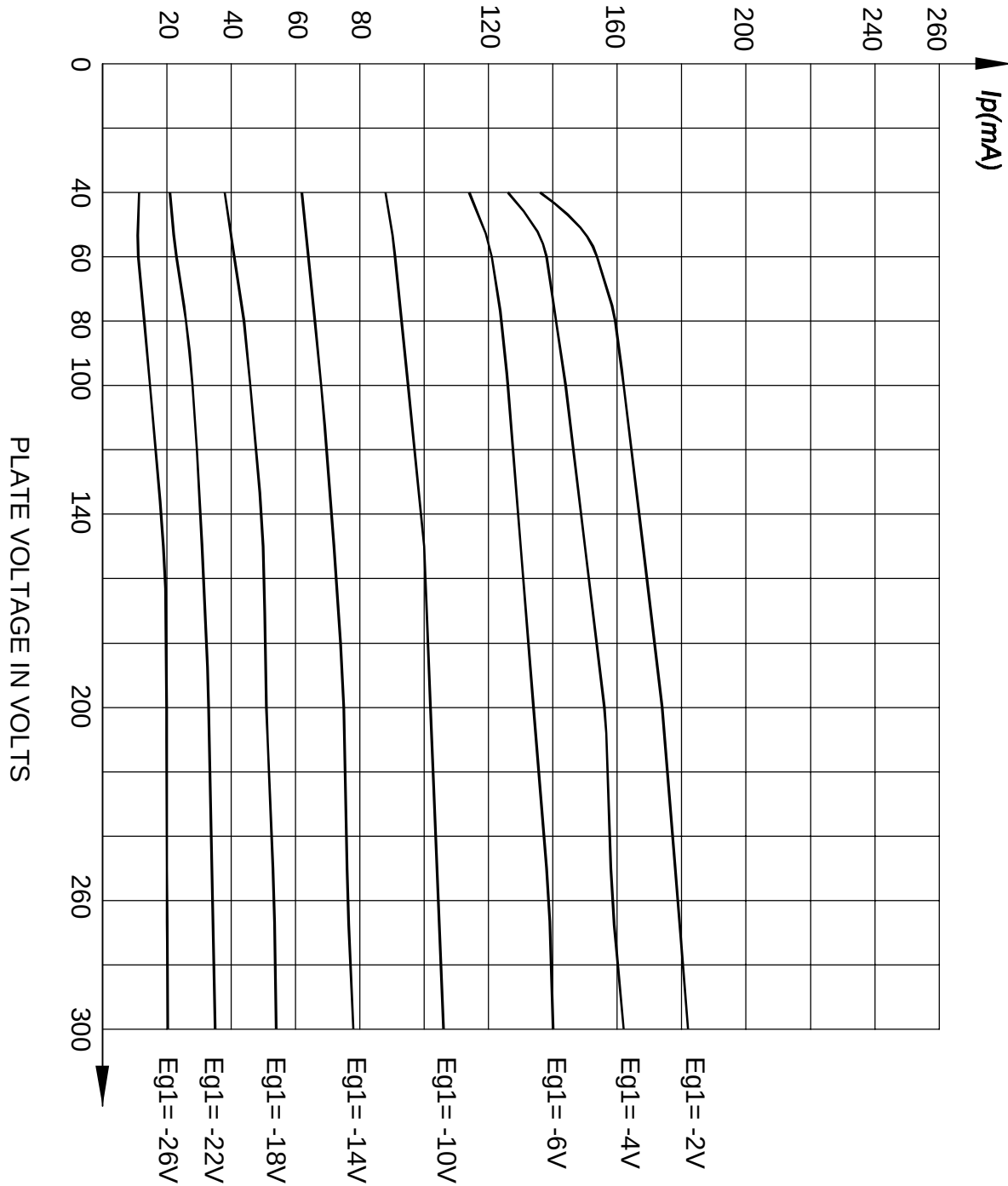
$I_p=f(E_{g1})$

$E_f=6.3V$



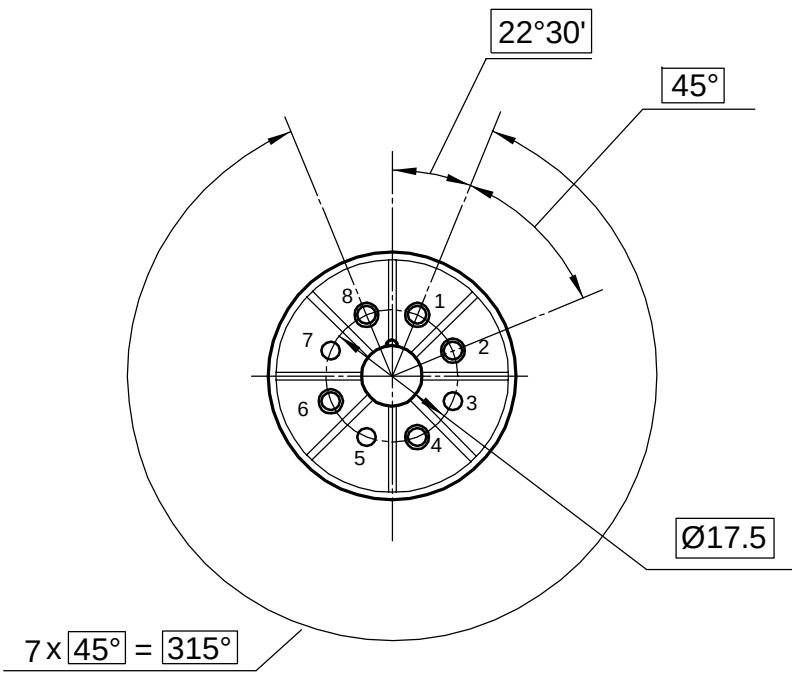
$I_p=f(E_p)$

$E_f=6.3V, E_{g2}=250V$

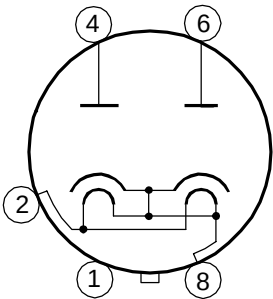


Vacuum tube 5AR4 is a two - plate cenotron in the glass bulb with octal base, wiht equipotential cathode, designed for two - half - period rectification of alternating current in the midpoint circuits in radio engineering devices.

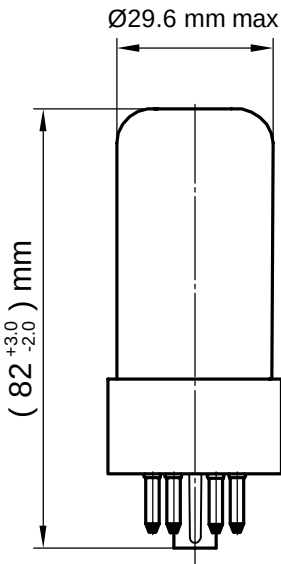
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



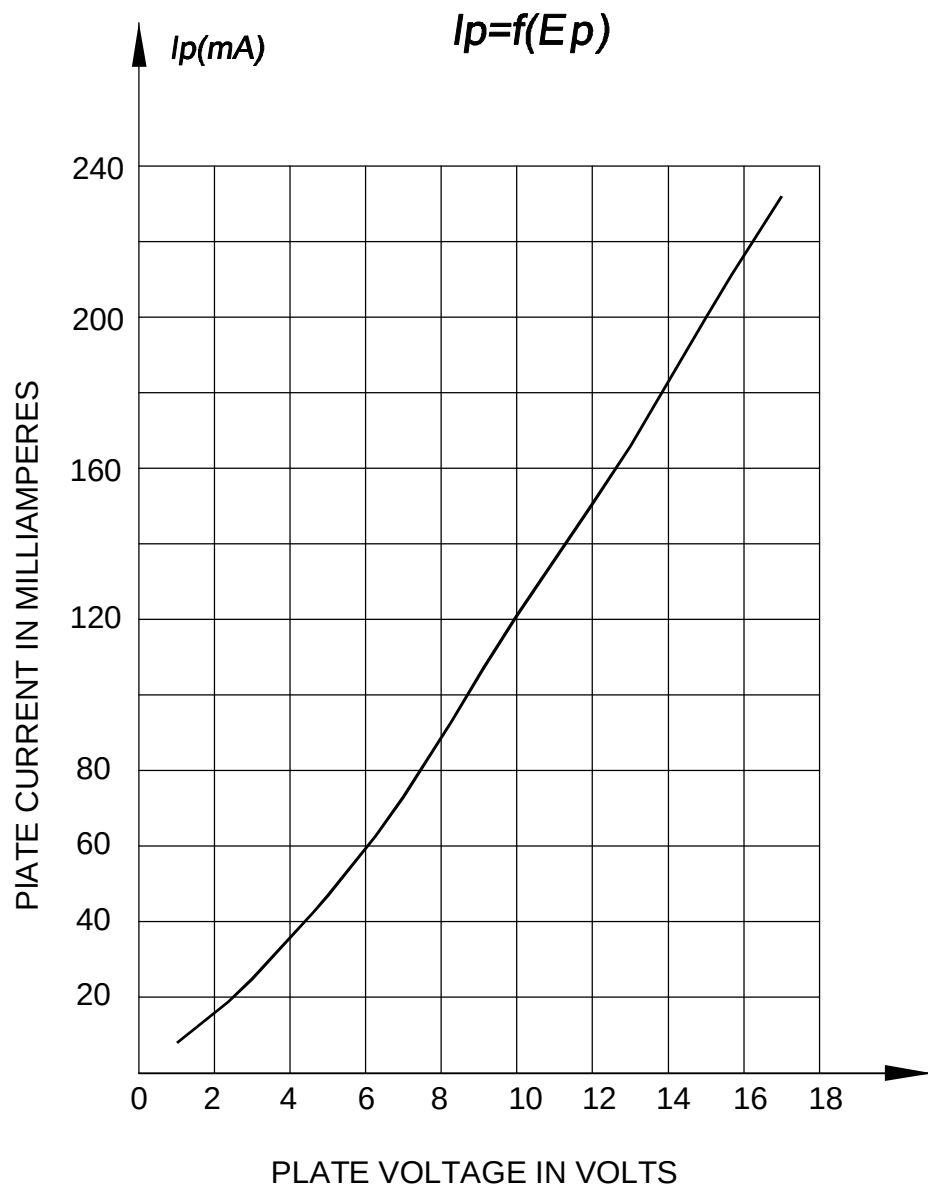
Lead designation	Name of electrode
1	Free
2	Heater
3, 5, 7	No
4	First diode plate
6	Second diode plate
8	Cathode, heater

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, A	1.7	2.1
Diode anod current, mA (at: filament voltage 5.0 V, plate voltage 17 V)	180	280
Rectified current, mA (at: filament voltage 5.0 V, the voltage of the secondary winding of the transformer, effective, 2 x 550 V, load resistance 3000 Ω , capacitance in the cathode chain, 40 μ F)	180	—
First and second diodes plate current difference, % (at: filament voltage 5.0 V, plate voltage 17 V)		± 30

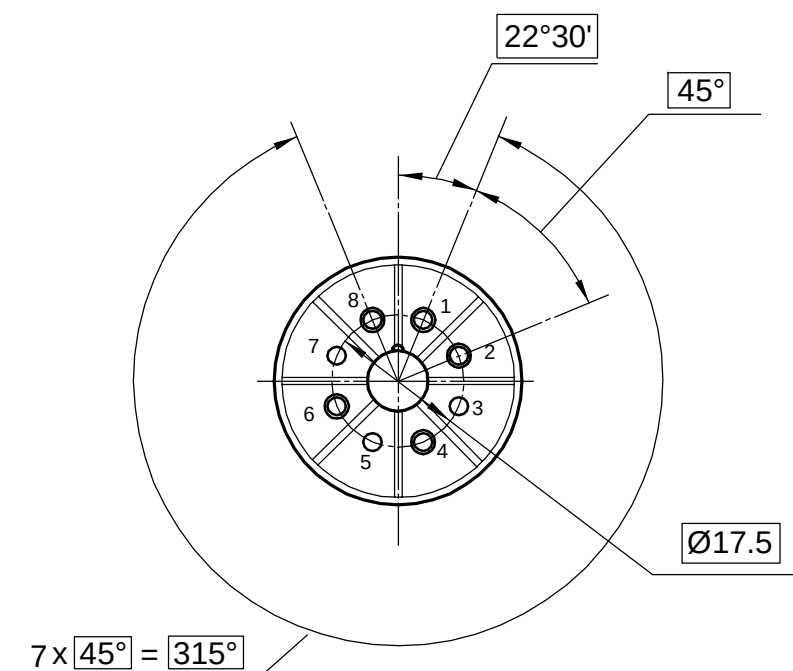
Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	4.5	5.5
Rectified current (average), mA	—	250
Anode current amplitude, mA	—	825
Current surge at the turn -on moment, A	—	3.7
Anod reverse voltage amplitude, V	—	1500
Temperature at the most heated part of the envelope, K°	—	473

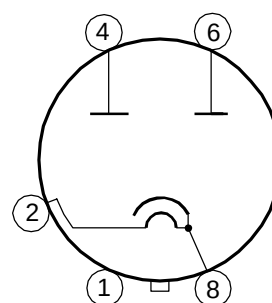


Vacuum tube 5Y3GT is a two - plate cenotron in glass bulb wiht octal base, with a common equipotential cathode, designed for two - half - period rectification of alternating current in the midpoint circuits in radio engineering devices.

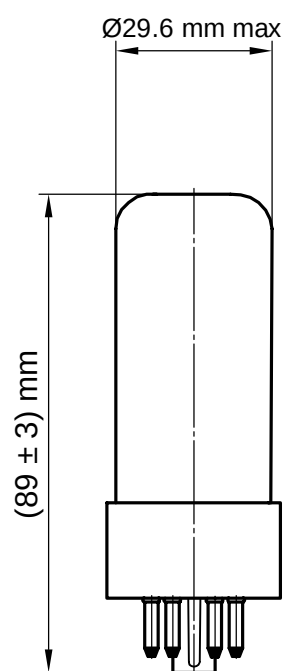
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1	Free
2	Heater
3, 5, 7	No
4	First diode plate
6	Second diode plate
8	Cathode, heater

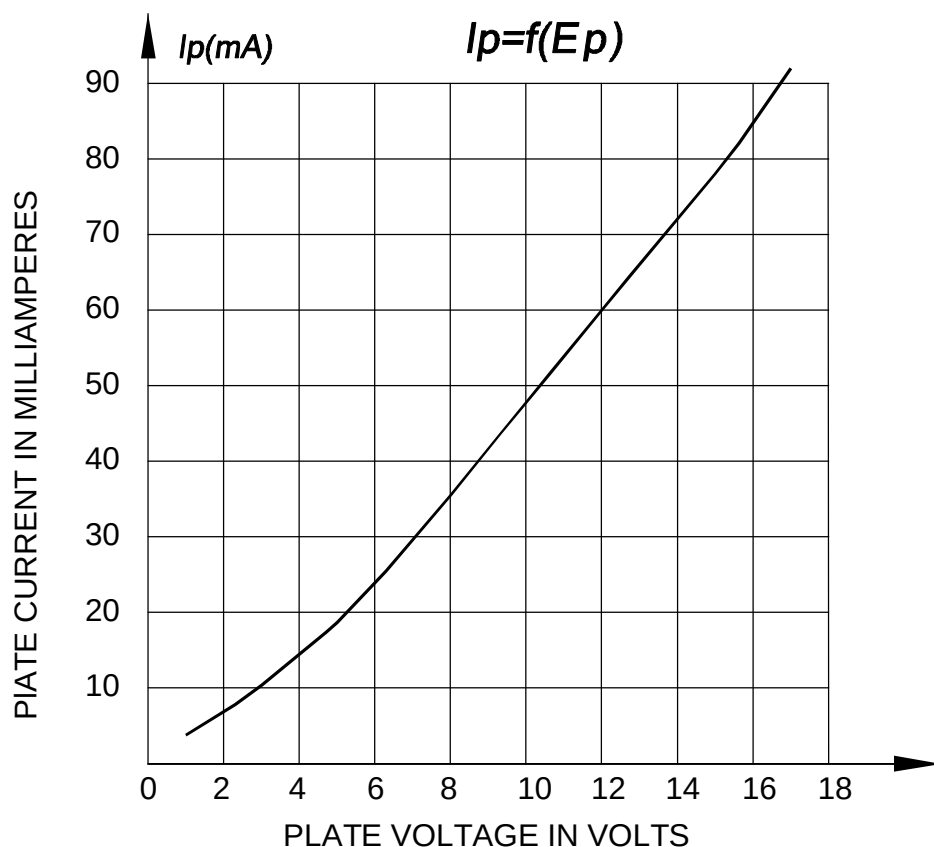
Electrical parameters

5Y3GT

Parameters, conditions and units	Nominal	
	min	max
Heater current, A	1.6	2.2
Diode anod current, mA (at: filament voltage 5.0 V, plate voltage 17 V)	70	—
Rectified current, mA (at: filament voltage 5.0 V, the voltage of the secondary winding of the transformer, effective, 2 x 400 V, load resistance 3300 Ω , capacitance in the cathode chain, 40 μ F)	133	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	4.5	5.5
Rectified current (average), mA	—	140
Anode current amplitude, mA	—	415
Current surge at the turn -on moment , A	—	1.4
Anod reverse voltage amplitude, V	—	1550
Temperature at the most heated part of the envelope, K°	—	473



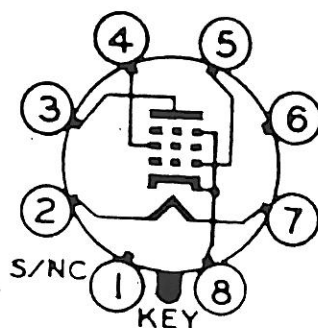
SOVTEK 6550WE

Typical operation, Class A amplifier

	triode scheme	tetrode scheme
Filament voltage	6.3 v	6.3 v
Plate voltage	250 v	400 v
Screen grid voltage	250 v	225 v
Grid1 bias voltage	- 14 v	- 16.5 v
Amplitude of grid1 voltage	14 v	16.5 v
Constant component of plate quiescent current	140 ma	87 ma
Constant component of grid2 quiescent current	12 ma	4 ma
Load resistance	1.5 kOhm	3 kOhm
Total non-linear distortions	7%	14%
Output power at maximum signal	12.5 w	20 w

Limiting values

	triode scheme		tetrode scheme	
	min	max	min	max
Filament voltage	5.7 v	6.9 v	5.7 v	6.9 v
Plate voltage, DC		440 v		800 v
Screen voltage, DC		-		440 v
Grid1 positive voltage, DC		0 v		0 v
Grid 1 negative voltage		300 v		300 v
Grid 2 negative voltage		440 v		600 v
Plate dissipation		44 w		42 w
Screen dissipation		6.6 w		6.6 w
Cathode current		192.5		230
Constant component of plate current		190 ma		190 ma
Cathode to filament voltage				
Filament voltage is positive to cathode, constant component		100 v		100 v
Filament voltage is positive to cathode (DC, amplitude)		200 v		200 v
Filament voltage is negative to cathode (DC, amplitude)		300 v		300 v
Resistance in grid1 circuit				
at fixed (clamp) bias		0.051 MOh		0.051 MOh
at automatic bias		0.24 MOh		0.24 MOh
Envelope temperature at hottest point		250° C		250° C



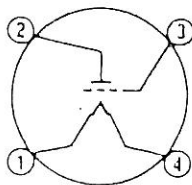
SOVTEK 6A3

6A3, direct heated triode with oxide cathode is used for low frequency power amplification in output stages of amplifiers.

Standard data		
Heater voltage (AC or DC)	6.3 v	
Plate voltage	250 v	
Grid voltage:		
under DC cathode power supply	- 42 v	
under AC cathode power supply	- 45 v	
Grid effective voltage	30 v	
Plate load resistance	2.5 kOhm	
General data		
Heater current	1 a	
Plate current	60 ma	
Transconductance	5.5 ma/v	
Amplification factor	2.2 μ	
Output power	>= 3.0 w	
Limiting values	min	max
Heater voltage	5.7 v	6.9 v
Plate voltage		450 v
Cathode current		100 ma
Plate dissipation power		15 w
Grid negative voltage		- 120 v
Envelope temperature		150° C

The tube can't be exploited at two or more limited conditions.

Max height - 140mm
Max diameter - 55mm
Max mass - 75g



Differential resistance - not less than 600 Ohm, not more than 1000 Ohm.
input capacitance = 7.5 uf max
output capacitance = 5.5 uf max
transfer capacitance = 16.5 uf max

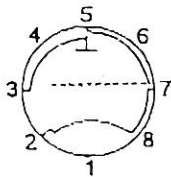
SOVTEK 6B4G

6B4G, direct heated triode with oxide cathode is used for low frequency power amplification in output stages of amplifiers.

Standard data		
Heater voltage (AC or DC)	6.3 v	
Plate voltage	250 v	
Grid voltage:		
under DC cathode power supply	- 42 v	
under AC cathode power supply	- 45 v	
Grid effective voltage	30 v	
Plate load resistance	2.5 kOhm	
General data		
Heater current	1 a	
Plate current	60 ma	
Transconductance	5.5 ma/v	
Amplification factor	- 2.2 μ	
Output power	>= 3.0 w	
Limiting values	min	max
Heater voltage	5.7 v	6.9 v
Plate voltage		450 v
Cathode current		100 ma
Plate dissipation power		- 15 w
Grid negative voltage		- 120 v
Envelope temperature		150° C

The tube can't be exploited at two or more limited conditions.

Max height - 140mm
 Max diameter - 55mm
 Max mass - 75g
 Base - octal



- Pin #1 - no pin
 2 - cathode
 3 - plate
 4 - free
 5 - grid
 6 - free
 7 - cathode
 8 - free

Differential resistance - not less than 600 Ohm, not more than 1000 Ohm.
 input capacitance = 7.5 uf max
 output capacitance = 5.5 uf max
 transfer capacitance = 16.5 uf max

SOVTEK

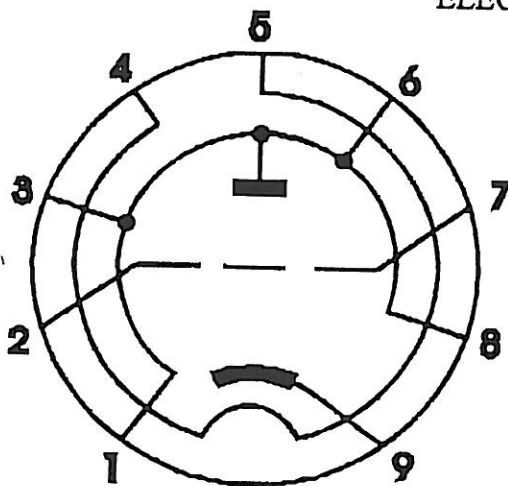
6C19II-B

GENERAL DATA

Heater voltage, V	from 5.7 to 6.9
Heater current (at rated voltage), A	from 0.93 to 1.07
Plate voltage, V, not more:	
supplied on cold tube	500
at plate dissipation power, W, not more	200
at plate dissipation power not more than 7 W	200
Negative grid voltage, V	from 1.5 to 200
Cathode to heater voltage, V, not more	1/- 250
Plate current, mA, not more	140
Transconductance, mA/V*	from 6 to 9
Plate dissipation power, W, not more	11
Input capacitance, pF	from 3.5 to 8
Output capacitance, pF	from 1 to 4
Transfer capacitance, pF not more	10
Minimal lifetime, hr	2500
Balloon temperature, °C, not more	250
Dimensions, mm not more:	
height	72
diameter	22.5
The tube contains, g: gold	0.003501
platinum	0.000184

*) at grid voltage -7 V and cathode circuit resistance 130 Oh. The tube can't be exploited at two or more limited conditions.

ELECTRODE SCHEME



Pin #	Electrode name
1	Plate
2	Grid
3	Plate
4	Heater
5	Heater
6	Plate
7	Grid
8	Plate
9	Cathode

ТРИОД TRIODE

6C33C-B

Триод 6C33C-B предназначен для работы в качестве пропускающей лампы в электронных стабилизаторах напряжения стационарной и подвижной аппаратуры.

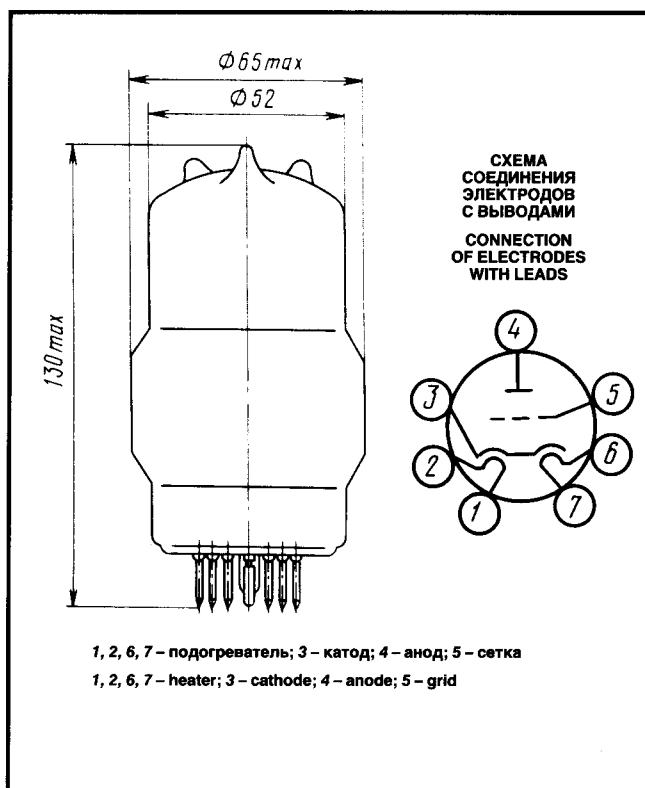
ОБЩИЕ СВЕДЕНИЯ

Катод – оксидный косвенного накала.
Оформление – стеклянное.
Рабочее положение – вертикальное.
Высота не более 130 мм.
Диаметр не более 65 мм.
Масса не более 200 г.

The 6C33C-B triode is used as a pass tube in electronic voltage regulators in stationary and mobile equipment.

GENERAL

Cathode: indirectly heated, oxide-coated.
Envelope: glass.
Working position: upright.
Height: at most 130 mm.
Diameter: at most 65 mm.
Mass: at most 200 g.



ДОПУСТИМЫЕ ВОЗДЕЙСТВУЮЩИЕ ФАКТОРЫ
ПРИ ЭКСПЛУАТАЦИИ

Вибрационные нагрузки:	
диапазон частот, Гц	30–300
ускорение, м/с ²	59
Многократные ударные нагрузки с ускорением при длительности удара до 80 мс, м/с ²	735
Температура окружающей среды, °C	–60 – +100
Относительная влажность воздуха при температуре до +40 °C, %	98

ОСНОВНЫЕ ТЕХНИЧЕСКИЕ ДАННЫЕ
Электрические параметры

Напряжение накала, В:	
при параллельном включении подогревателей	6,3
при последовательном включении подогревателей	12,6
Ток накала, А:	
при параллельном включении подогревателей	6–7,2
при последовательном включении подогревателей	3–3,6
Напряжение анода, В	120
Ток анода, мА	470–630
Крутизна характеристики, мА/В	30–50
Обратный ток сетки, мкА, не более	5
Внутреннее сопротивление, Ом	80–120
Время готовности, с, не более	120
Межэлектродные емкости, пФ:	
входная	23–37
выходная	9,5–11,5
проходная	24–38
Емкость катод-подогреватель, пФ, не более	60
Электрические параметры в течение 2000 ч эксплуатации:	
ток анода, мА, не менее	340
обратный ток сетки, мкА, не более	15
изменение тока анода, %, не более	±30

Максимальные предельно допустимые
эксплуатационные данные

Напряжение накала, В:	
при последовательном включении подогревателей	11,3–13,9
при параллельном включении подогревателей и при работе с одним катодом	5,7–6,9
Напряжение анода, В:	
при мощности, рассеиваемой анодом, более 30 Вт	250
при мощности, рассеиваемой анодом, не более 30 Вт	450
при включении на холодную лампу	600
Напряжение сетки, отрицательное, В	0,5–150
Ток анода, мА:	
при работе с двумя катодами	60
при работе с одним катодом	45
Напряжение между катодом и подогревателем, В	300

OPERATING ENVIRONMENTAL CONDITIONS

Vibration loads:	
frequency, Hz	30–300
acceleration, m/s ²	59
Multiple impacts at impact duration up to 80 ms, m/s ²	735
Ambient temperature, °C	–60 to +100
Relative humidity at up to +40 °C, %	98

BASIC DATA
Electrical Parameters

Heater voltage, V:	
with heaters connected in parallel	6.3
with heaters connected in series	12.6
Heater current, A:	
with heaters connected in parallel	6–7.2
with heaters connected in series	3–3.6
Anode voltage, V	120
Anode current, mA	470–630
Mutual conductance, mA/V	30–50
Inverse grid current, μA, at most	5
Internal resistance, Ω, at most	120
Warm up time, s, at most	120
Interelectrode capacitance, pF:	
input	23–37
output	9.5–11.5
transfer	24–38
Cathode-heater capacitance, pF, at most	60
Electrical parameters over 2,000 h of service:	
anode current, mA, at least	340
inverse grid current, μA at most	15
change in anode current, %, at most	±30

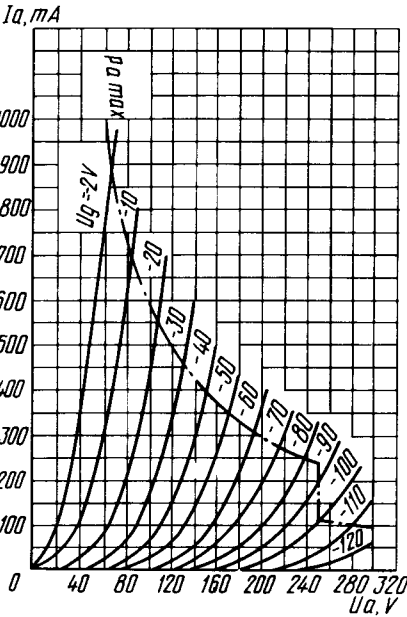
Limit Operating Values

Heater voltage, V:	
with heaters connected in series	11.3–13.9
with heaters connected in parallel and in single-cathode operation	5.7–6.9
Anode voltage, V:	
at anode dissipation above 30 W	250
at anode dissipation at most 30 W	450
at switching on cold tube	600
Negative grid voltage, V	0.5–150
Anode current, mA:	
in operation with two cathodes	60
in operation with single cathode	45
Voltage between cathode and heater, V	300
Resistance in grid circuit, MΩ	0.2
Bulb temperature, °C	260

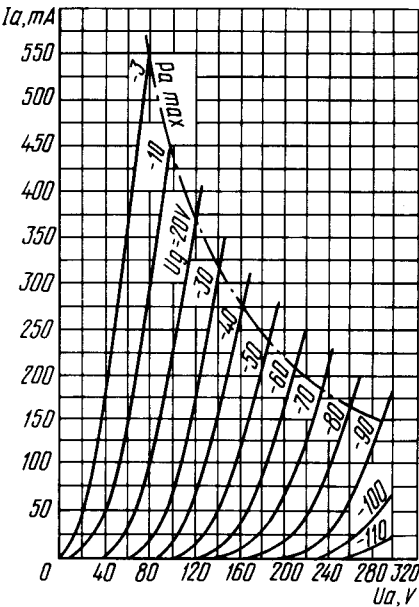
ТРИОД
TRIODE

6C33C-B

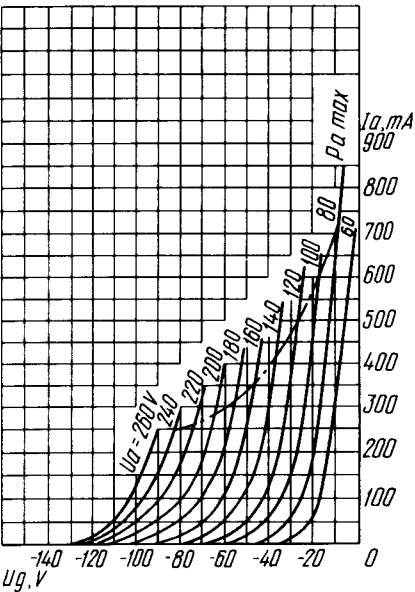
Сопротивление в цепи сетки, МОм 0,2
Температура баллона, °C 260



Усредненные анодные характеристики при работе с одним катодом: $U_i = 6,3 \text{ В}$;
— · — наибольшая допустимая мощность, рассеиваемая анодом ($P_{a \text{ max}}$)
Averaged Anode Characteristic Curves (single-cathode operation): $U_i = 6,3 \text{ В}$;
— · — $P_{a \text{ max}}$

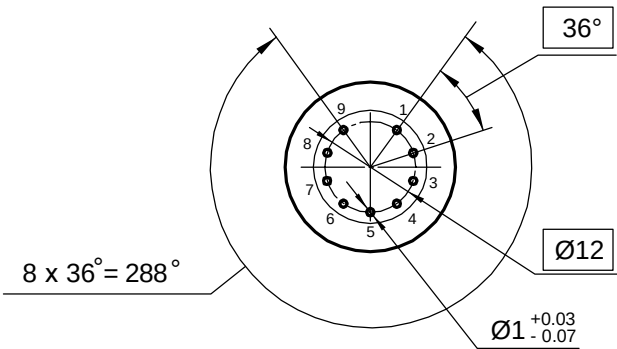


Усредненные анодно-сеточные характеристики: $U_i = 12,6 \text{ В}$;
— · — наибольшая допустимая мощность, рассеиваемая анодом ($P_{a \text{ max}}$)
Averaged Anode-Grid Characteristic Curves: $U_i = 12,6 \text{ В}$;
— · — $P_{a \text{ max}}$

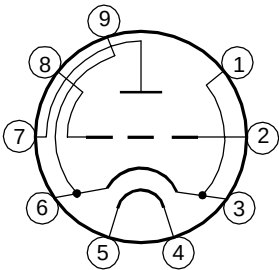


Vacuum tube 6C45Pi -EB/6C45Π -E is a miniature high frequency triode with equipotential cathode, with high slope, designed for broadband voltage amplification in radio engineering devices.

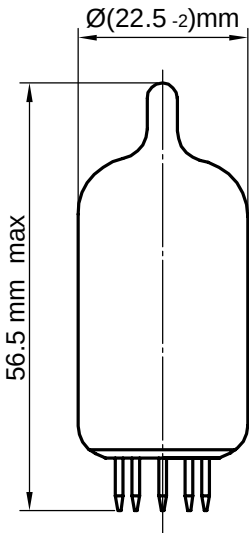
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1, 3, 6, 9	Cathode
2, 8	Grid
4, 5	Heater
7	Plate

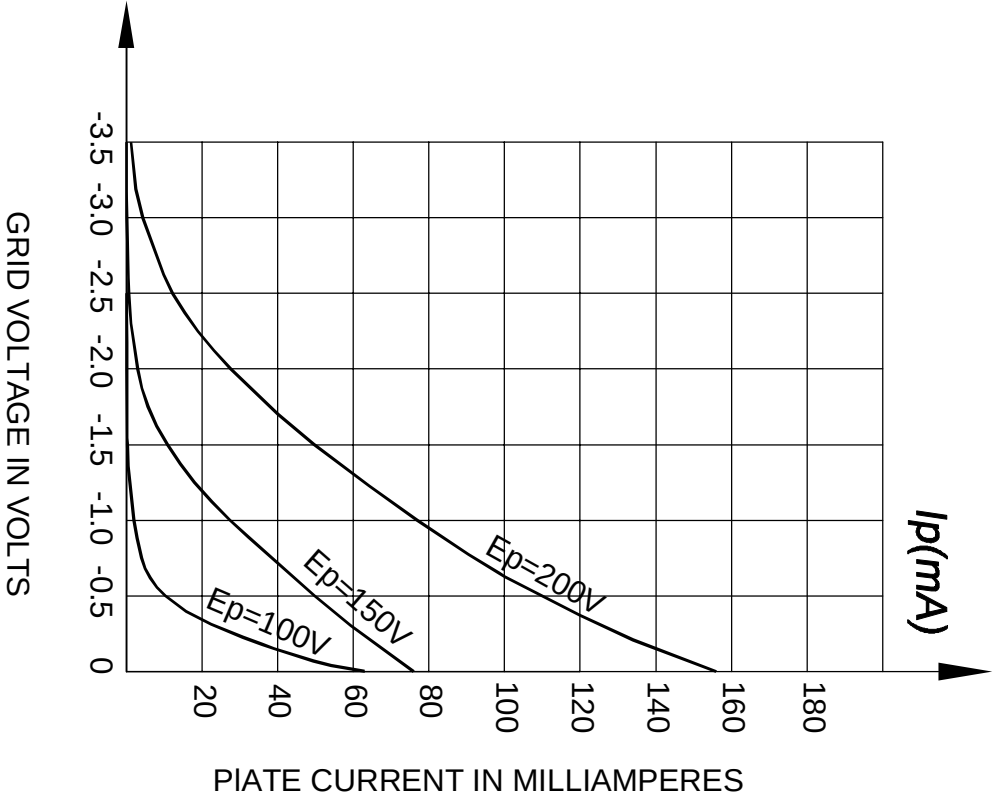
Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA	410	470
Grid reverse current, μA , (at: filament voltage 6.3 V, plate voltage 150 V, grid voltage minus 2 V, resistance in grid circuit 0.15 M Ω)	—	0.5
Plate current, mA, (at: filament voltage 6.3 V, plate voltage 150 V, resistance in cathode circuit 30 Ω)	26	54
Slope of characteristic, mA/V (at: filament voltage 6.3 V, plate voltage 150 V, resistance in cathode circuit 30 Ω)	32	—
Amplification factor (at: filament voltage 6.3 V, plate voltage 150 V, resistance in cathode circuit 30 Ω)	36	68
Plate current at the beginning of the characteristic, μA (at: filament voltage 6.3 V, plate voltage 150 V, grid voltage minus 2 V)		10
Cathode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage ± 100 V)	5	

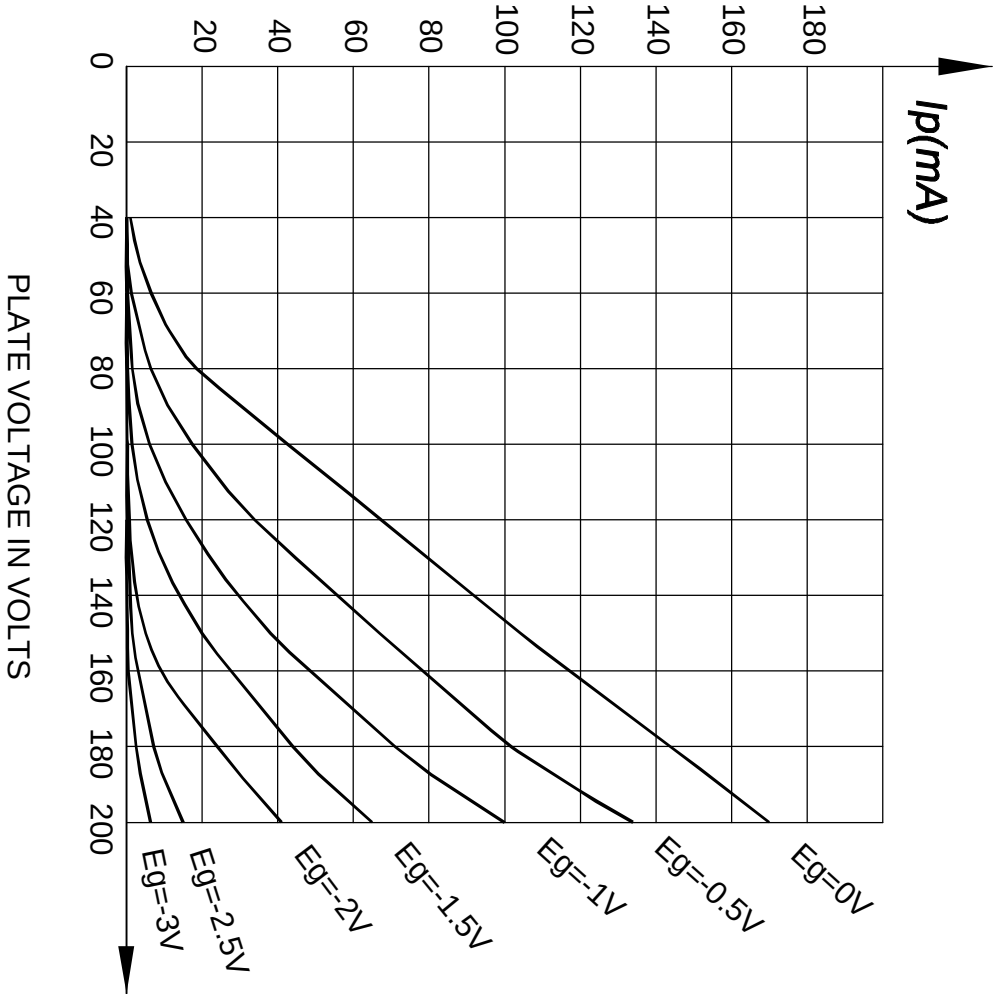
Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	6.6
Plate voltage, V	—	150
Cathode - heater voltage, V	—	± 100
Cathode current, mA	—	60
Power dissipation at the plate of each triode, W	—	7.8
Grid circuit resistance , M Ω		0.15
Temperature at the most heated part of the envelope, K°	—	483

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

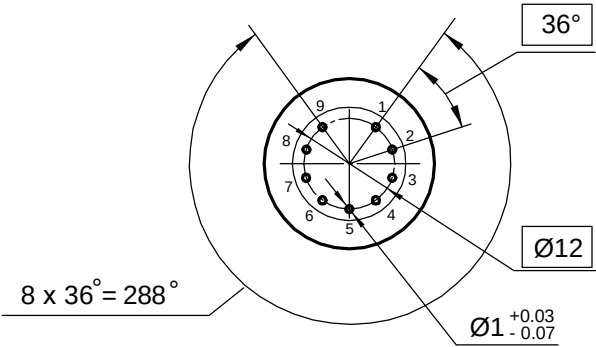


$I_p=f(E_p)$
 $E_f=6.3V$

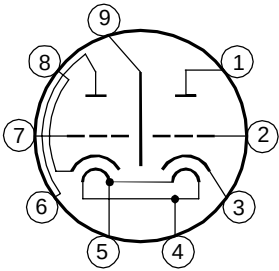


Vacuum tube 6H30Pi -EB/6H30Π -EB is a miniature twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

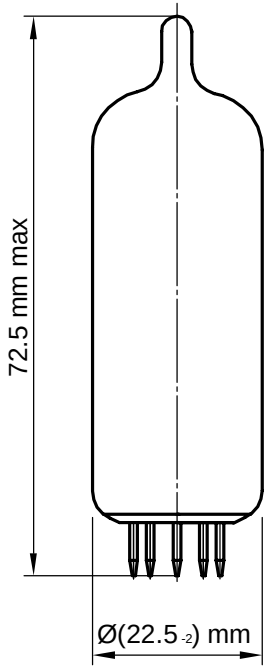
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



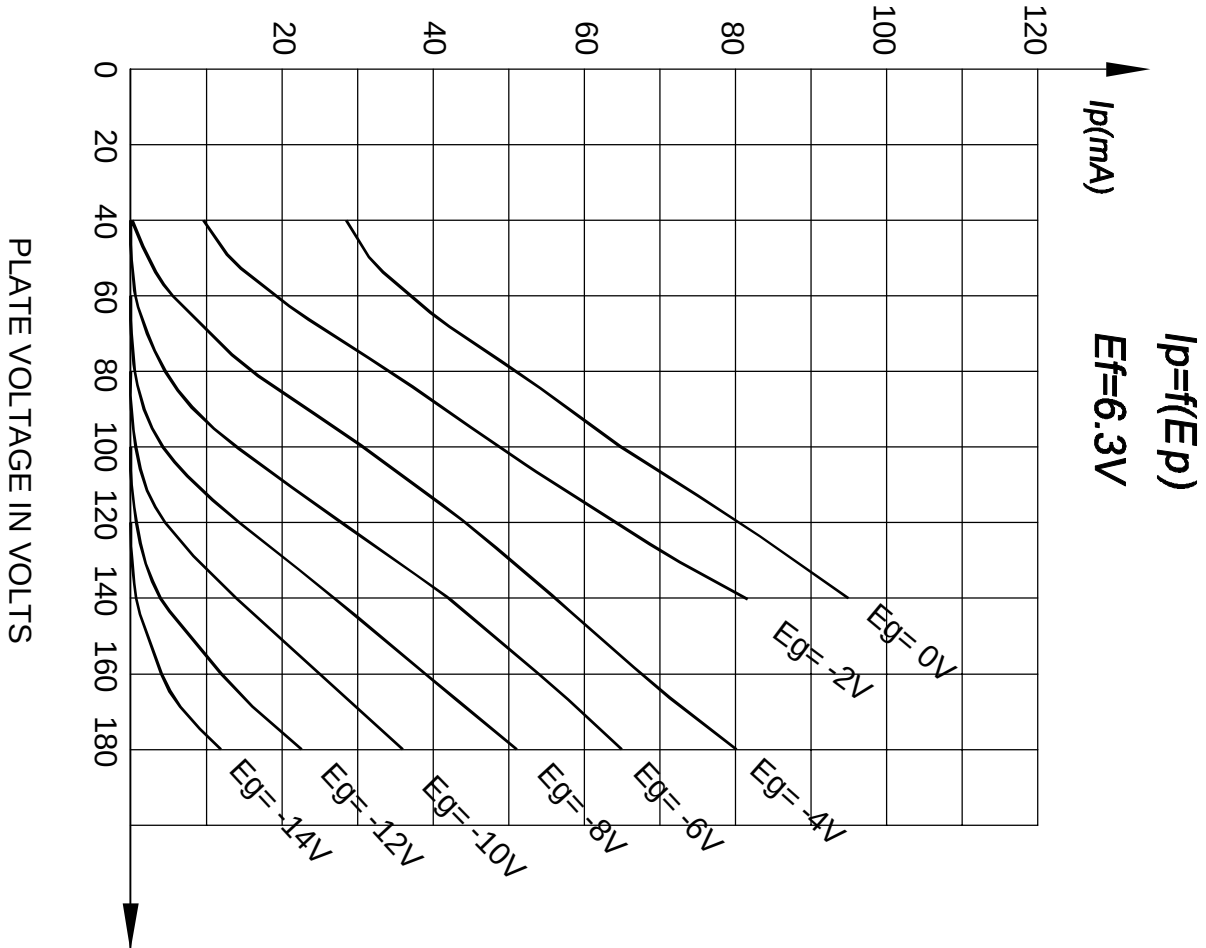
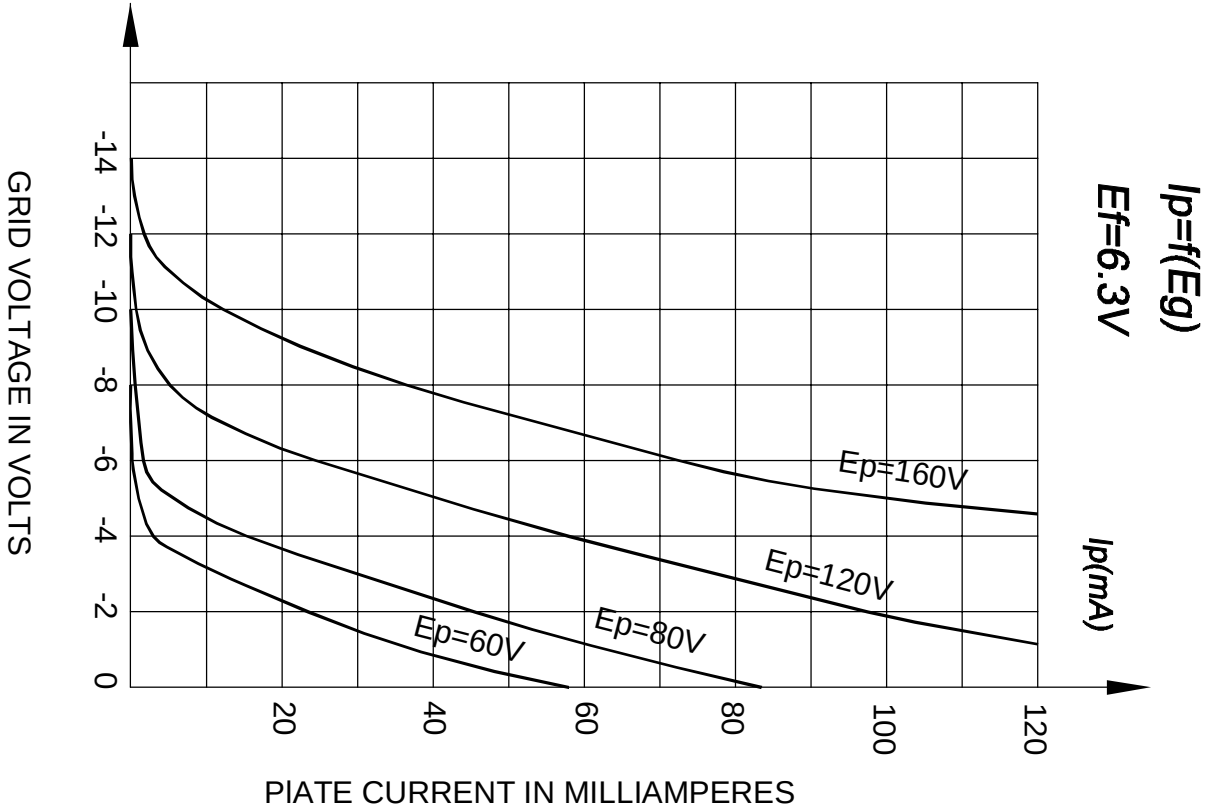
Lead designation	Name of electrode
1	Second triode plate
2	Second triode grid
3	Second triode cathode
4, 5	Heater
6	First triode plate
7	First triode grid
8	First triode cathode
9	Screen

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA	725	900
Grid reverse current, μA , (at: filament voltage 6.3 V, plate voltage 80 V, cathode circuit resistance 56 Ω) resistance in grid circuit 0.15 M Ω)	—	1.5
Plate current, mA, (at: filament voltage 6.3 V, plate voltage 80 V, cathode circuit resistance 56 Ω)	30	50
First and second triodes plate current difference, % (at: filament voltage 6.3 V, plate voltage 80 V, cathode circuit resistance 56 Ω)	—	± 20
Plate current at the beginning of the characteristic, μA (at: filament voltage 6.3 V, plate voltage 80 V, grid voltage minus 12 V)		30
Slope of characteristic, mA/V (at: filament voltage 6.3 V, plate voltage 80 V, cathode circuit resistance 56 Ω)	13	23
Amplification factor (at: filament voltage 6.3 V, plate voltage 80 V, cathode circuit resistance 56 Ω)	12	18
Cathode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode -heater voltage ± 150 V)	6	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	6	6.6
Plate voltage, V	—	250
Cathode - heater voltage, V	—	± 400
Cathode current of each triode (average), mA	—	100
Power dissipation at the plate of each triode, W	—	4.0
Grid circuit resistance for each of the triodes, k Ω self - bias	—	300



SOVTEK

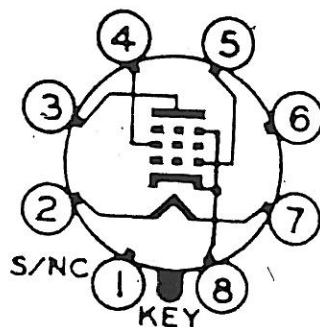
6L6WXT

Typical operation, Class A amplifier

Plate voltage	350 v
Grid2 voltage	250 v
Grid1 voltage, DC	-18 v
Grid1 voltage, AC, amplitude value	18 v
Plate current	54 ma
Grid2 current	3.0 ma
Transconductance	5.2 ma/v
Plate load resistance	4.2 kOhm
Output power	10.8 w
Cathode to heater leakage current	20 μ a

Limiting values

	min	max
Filament voltage	5.7 v	6.9 v
Plate voltage		500 v
Grid2 voltage		450 v
Grid 1 negative voltage		100 v
Plate dissipation power		30 w
Grid2 dissipation power		5 w
Cathode to filament voltage		± 200 v
Resistance in grid1 circuit		
at fixed (clamp) bias		0.1 MOh
at automatic bias		0.51 MOh
Envelope temperature at hottest point		250° C



**ДВОЙНОЙ ТРИОД
DOUBLE TRIODE**

SOVTEK 6N1-P

6Н1П

ОБЩИЕ СВЕДЕНИЯ

Двойной триод 6Н1П предназначен для усиления напряжения низкой частоты.

Катод — оксидный косвенного накала.

Масса не более 15 г.

GENERAL

The 6N1P double triode has been designed for low-frequency voltage amplification.

Cathode: indirectly heated, oxide-coated.

Mass: at most 15 g.

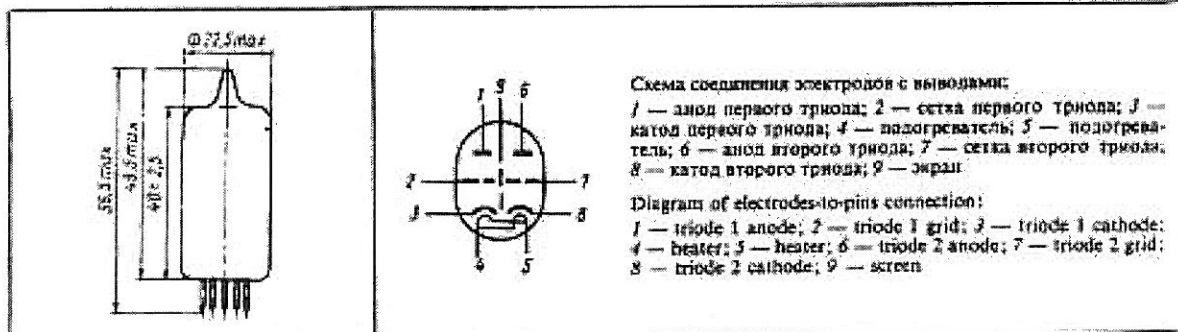


Схема соединения электродов с выводами:

1 — анод первого триода; 2 — сетка первого триода; 3 — катод первого триода; 4 — подогреватель; 5 — подогреватель; 6 — анод второго триода; 7 — сетка второго триода; 8 — катод второго триода; 9 — экран.

Diagram of electrodes-to-pins connection:

1 — triode 1 anode; 2 — triode 1 grid; 3 — triode 1 cathode; 4 — heater; 5 — heater; 6 — triode 2 anode; 7 — triode 2 grid; 8 — triode 2 cathode; 9 — screen.

УСЛОВИЯ ЭКСПЛУАТАЦИИ

Вибрационные нагрузки в диапазоне частот от 1 до 200 Гц с ускорением до 5 г. Многократные ударные нагрузки с ускорением до 15 г. Температура окружающей среды от -45 до $+70$ °C. Относительная влажность воздуха до 98% при температуре до 25 °C.

SERVICE CONDITIONS

Vibration: at frequencies from 1 to 200 Hz with acceleration up to 5 g. Multiple impacts: with acceleration up to 15 g. Ambient temperature: from -45 to $+70$ °C. Relative humidity: up to 98% at up to 25 °C.

ОСНОВНЫЕ ДАННЫЕ

Электрические параметры

Напряжение, В:	
накала	6,3
анода	250
Ток, мА:	
накала	600±50
анода	5,6—10,5
Сопротивление в цепи катода, кОм	0,6
Крутизна характеристики, мА/В	3,5—5,5
Обратный ток сетки (при сопротивлении в цепи сетки 1 МОм), мкА	≤1
Коэффициент усиления	35±8
Емкость, пФ:	
входная	3,1±1,1
проходная	≤2,7
выходная первого триода	1,6±0,5
выходная второго триода	1,7±0,5
анод первого триода — анод второго триода	≤0,2
Электрические параметры в течение 5000 ч эксплуатации:	
крутизна характеристики, мА/В	≥3

Предельные значения допустимых режимов эксплуатации

	Максимум	Минимум
Напряжение, В:		
накала	6,9	5,7
анода	300	
между катодом и подогревателем:		
при положительном потенциале подогревателя	100	
при отрицательном потенциале подогревателя	250	
Ток катода, мА	25	
Мощность, рассеиваемая анодом каждого триода, Вт	2,2	
Сопротивление в цепи сетки каждого триода, МОм	1	

SPECIFICATION

Electrical Parameters

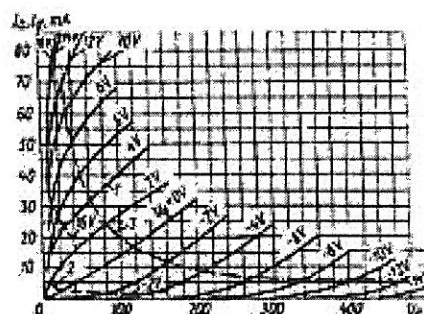
Voltage, V:	
heater	6.3
anode	250
Current, mA:	
heater	600±50
anode	5.6—10.5
Resistance in cathode circuit, kOhm	0.6
Transconductance, mA/V	3.5—5.5
Inverse grid current, at resistance 1 MOhm in grid circuit, μA	≤1
Amplification factor	35±8
Capacitance, pF:	
input	3.1±1.1
transfer	≤2.7
first triode output	1.6±0.5
second triode output	1.7±0.5
1st triode anode-to-2nd triode anode	≤0.2
Electrical parameters over 5000 operating hours:	
transconductance, mA/V	≥3

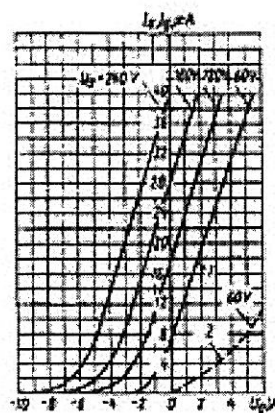
Limit Values of Operating Conditions

	Maximum	Minimum
Voltage, V:		
heater	6.9	5.7
anode	300	
between cathode and heater:		
with heater at positive potential	100	
with heater at negative potential	250	
Cathode current, mA	25	
Power dissipation at anode of each triode, W	2.2	
Resistance in grid circuit of each triode, MOhm	1	

Усредненные характеристики (для каждого триода):
1 — анодные; 2 — сеточно-анодные; 3 — наибольшая допустимая мощность, рассеиваемая анодом
 $U_a = 6.3$ V

Averaged characteristics (for each triode):
1 — anode; 2 — grid-anode; 3 — maximum permissible anode dissipation
 $U_a = 6.3$ V



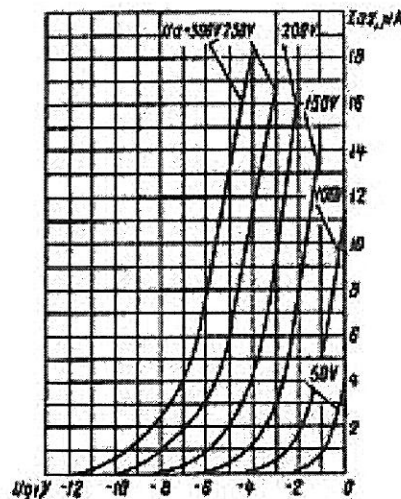


Усредненные характеристики (для каждого триода):

1 — анодно-сеточные; 2 — сеточные
 $U_k = 6.3 \text{ V}$

Averaged characteristics (for each triode):

1 — anode-grid; 2 — grid
 $U_k = 6.3 \text{ V}$

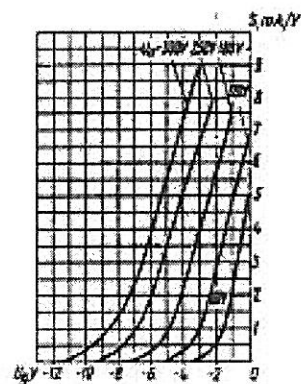


Усредненные анодно-сеточные начальные характеристики (для каждого триода):

$U_k = 6.3 \text{ V}$

Averaged cutoff anode-grid characteristics (for each triode):

$U_k = 6.3 \text{ V}$

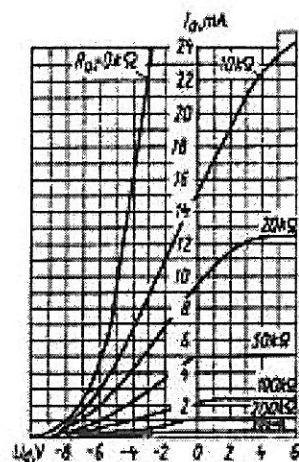


Усредненные характеристики крутизны в зависимости от напряжения сетки (для каждого триода):

$U_k = 6.3 \text{ V}$

Averaged characteristics of transconductance versus grid voltage (for each triode):

$U_k = 6.3 \text{ V}$

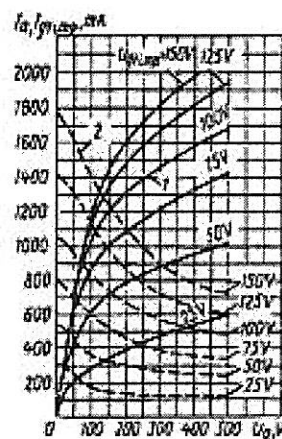


Усредненные динамические анодно-сеточные характеристики (для каждого триода):

$U_k = 6.3 \text{ V}$, $E_a = 250 \text{ V}$

Averaged dynamic anode-grid characteristics (for each triode):

$U_k = 6.3 \text{ V}$, $E_a = 250 \text{ V}$



Усредненные импульсные характеристики:

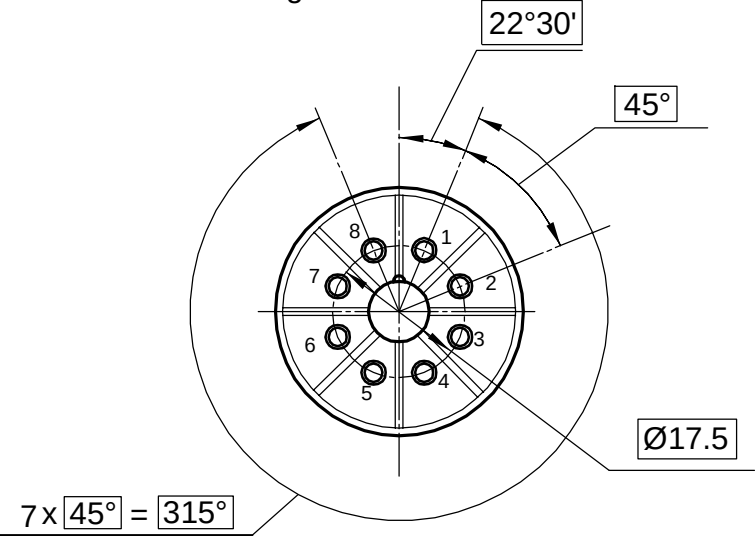
1 — анодные; 2 — сеточно-анодные
 $U_k = 6.3 \text{ V}$, $f = 1 \text{ kHz}$, $\tau = 2 \mu\text{s}$

Averaged pulse characteristics:

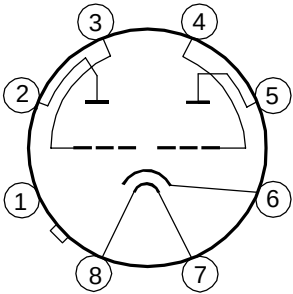
1 — anode; 2 — grid-anode
 $U_k = 6.3 \text{ V}$, $f = 1 \text{ kHz}$, $\tau = 2 \mu\text{s}$

Vacuum tube 6SC7 is a twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

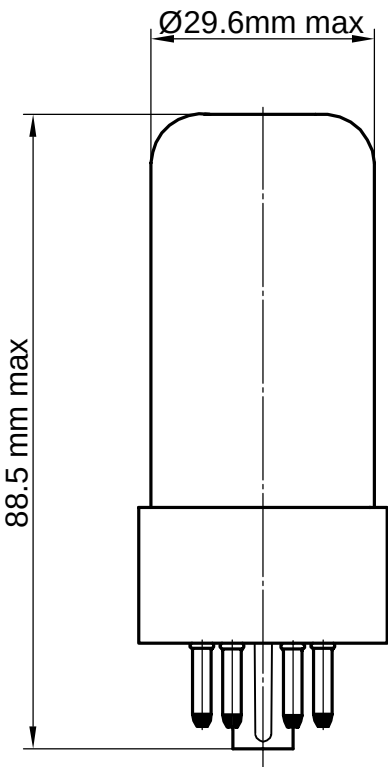
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



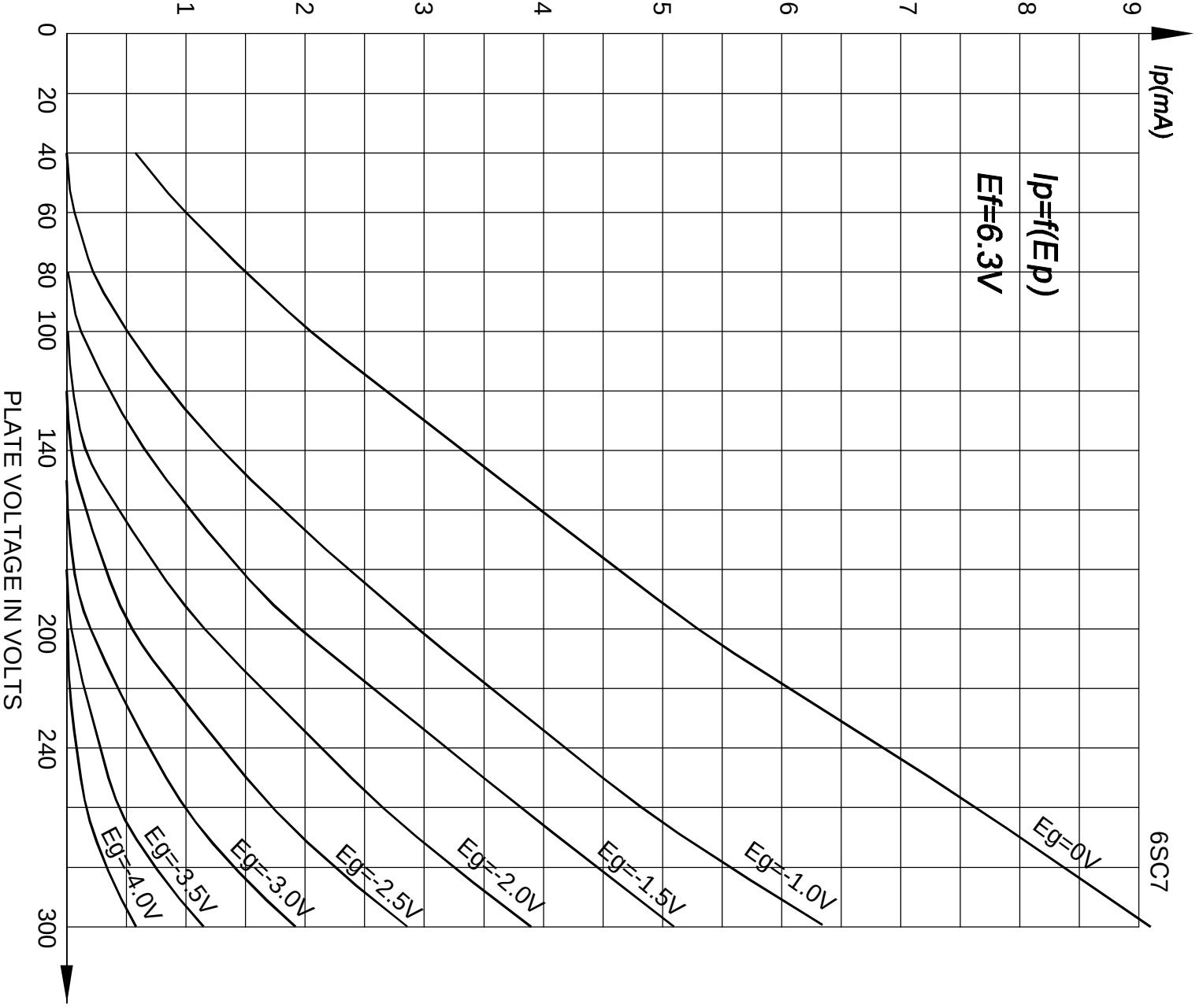
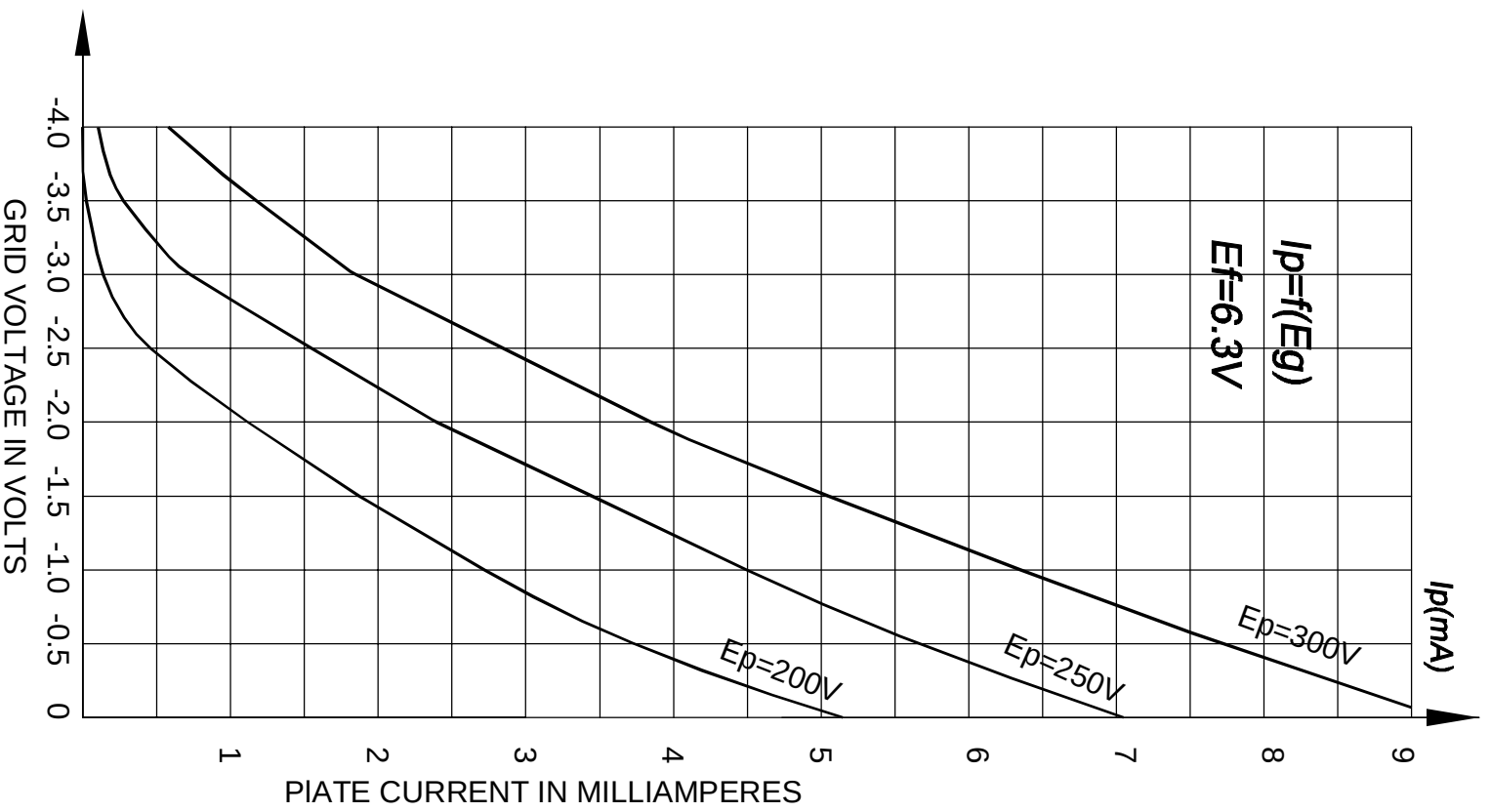
Lead designation	Name of electrode
1	Free
2	First triode plate
3	First triode grid
4	Second triode grid
5	Second triode plate
6	Cathode
7, 8	Heater

Electrical parameters

Parameters, conditions and units	Nominal	
	min	max
Heater current, mA at: filament voltage 6.3 V	400	450
Grid back current, μA , (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 2.0 V, resistance in grid circuit 1.0 M Ω)	—	0.5
Plate current, mA, (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 2.0 V)	1.2	3.8
Slope of characteristic, mA/V (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 2.0 V)	1.2	2.5
Amplification factor (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 2.0 V)	55	85
Plate current at the beginning of the characteristic, μA (at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 12.0 V)	—	20
Cathode - heater insulation resistance, M Ω (at: filament voltage 6.3 V, cathode - heater voltage ± 200 V)	10	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	7.0
Plate voltage, V	—	300
Grid voltage, negative, V	—	50
Cathode - heater voltage, V	—	± 200
Cathode current, mA	—	10
Power dissipation at the plate of each triode, W	—	1.2
Grid circuit resistance for each of the triodes, M Ω fixed bias	—	1.0
self - bias	—	2.0
Temperature at the most heated part of the envelope, K°	—	363



Двойной триод 6H9C предназначен для усиления напряжений низкой частоты.

Двойные триоды 6H9C выпускаются в стеклянном оформлении с октальным цоколем, с оксидным катодом косвенного накала.

Двойные триоды 6H9C устойчивы к воздействию окружающей температуры от -60 до $+70^{\circ}\text{C}$ и относительной влажности 95—98% при температуре $+40^{\circ}\text{C}$, а также к воздействию механических нагрузок: вибрационных до 2,5 г, ударных многократных до 35 г.

Наибольший вес 34 г.

Гарантированная долговечность 1500 часов.

The 6H9C double triode is designed for amplification of low-frequency voltage.

The 6H9C double triodes are enclosed in glass bulb and are provided with an octal base and an indirectly heated oxide-coated cathode.

The 6H9C double triodes are resistant to ambient temperature from -60 to $+70^{\circ}\text{C}$ and relative humidity of 95 to 98% at $+40^{\circ}\text{C}$, as well as to mechanical loads: vibration loads up to 2.5 g and multiple impact loads up to 35 g.

Maximum weight: 34 gr.

Service life guarantee: 1500 hr.

ЭЛЕКТРИЧЕСКИЕ ДАННЫЕ
ELECTRICAL CHARACTERISTICS

U_h	6.3 V	$I_a^{(1)}$	$2.3 \pm 1.3 \text{ mA}$
I_h	$300 \pm 25 \text{ mA}$	$S^{(1)}$	$1.7 \pm 0.5 \text{ mA/V}$
U_a	250 V	$\mu^{(1)}$	70 ± 15
U_{gr}	-3 V		

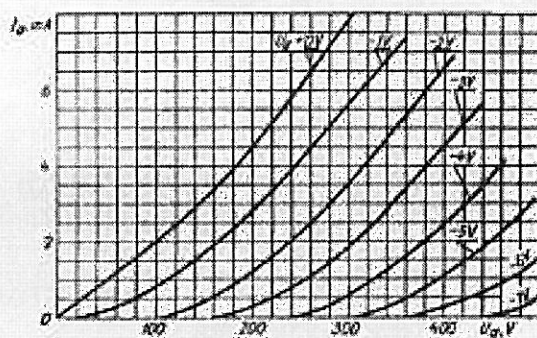
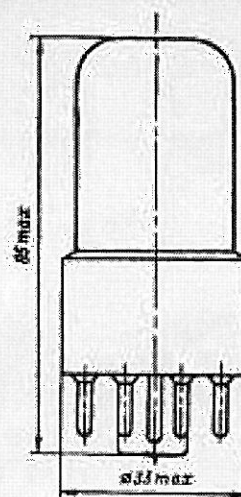
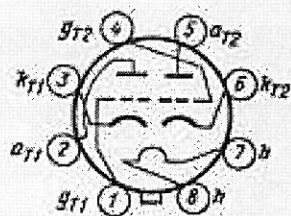
¹⁾ Каждого триода.
For each triode.

МЕЖДУЭЛЕКТРОДНЫЕ ЕМКОСТИ
INTERELECTRODE CAPACITANCES

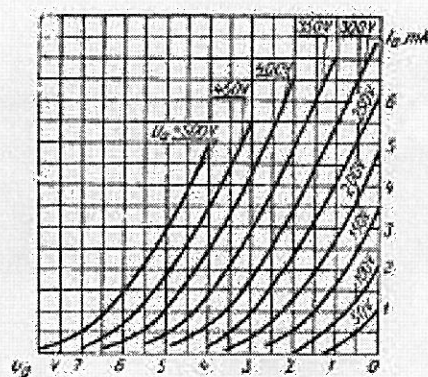
C_{g1k}	1.7—3.2 pF
C_{ak}	0.3—1.6 pF
C_{g1a}	1.5—4.0 pF

ПРЕДЕЛЬНО ДОПУСТИМЫЕ ЭКСПЛУАТАЦИОННЫЕ ДАННЫЕ
MAXIMUM AND MINIMUM PERMISSIBLE RATINGS

	Max	Min
U_h	7 V	5.7 V
U_a	275 V	
P_d	1.1 W	
U_{gh}	100 V	
R_{gr}	0.5 MΩ	
$T_{ambient}$ bulb	90° C	



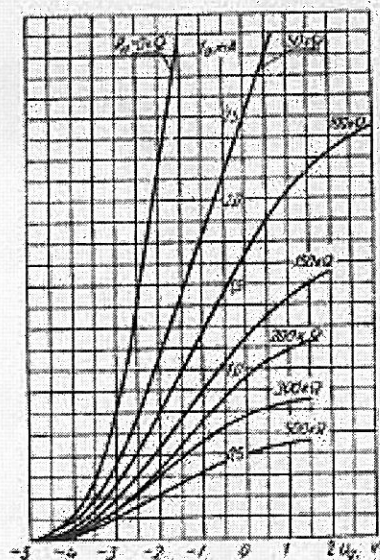
$I_a = f(U_a)$
(каждого триода)
(for each triode)
 $U_h = 6,3 \text{ V}$



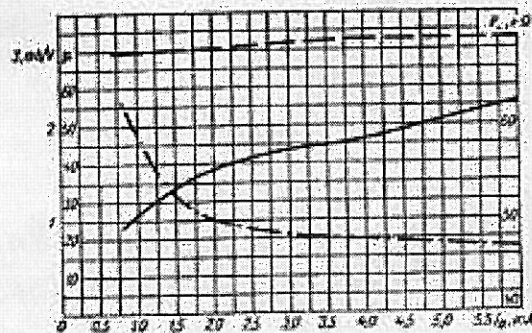
$I_a = f(U_{гг})$
(каждого триода)
(for each triode)
 $U_h = 6,3 \text{ V}$

Двойной триод
Double triode

6H9C



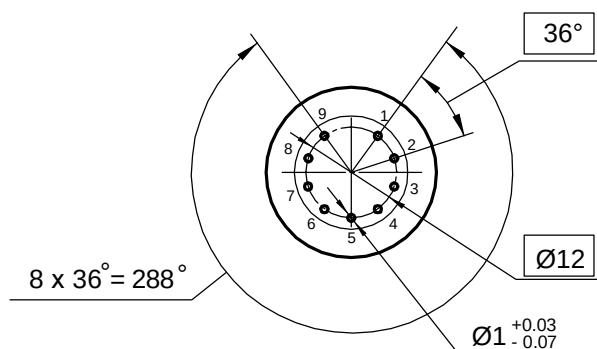
$I_{g1} = I(U_{g1})$
(на каждого триода)
(for each triode)
 $U_{g2} = 6.3 \text{ V}$ $U_{a2} = 250 \text{ V}$



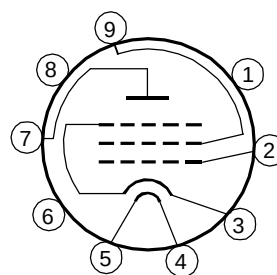
$S, \mu, R_L = I(I_{a1})$
(на каждого триода)
(for each triode)
— S $U_{g1} = 6.3 \text{ V}$
- - - μ $U_{a2} = 250 \text{ V}$
- - - - R_L

Vacuum tube EL84/6BQ5 is a miniature pentode with equipotential cathode, designed to amplify low frequency power in the output stages of HI-FI audio.

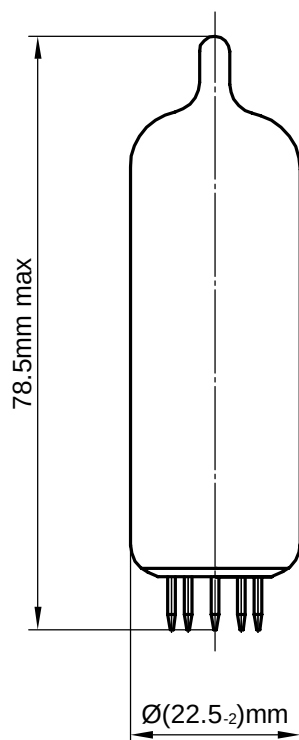
Pin arrangement



Electrode -to - lead connection diagram



Dimensions



Lead designation	Name of electrode
1, 6, 8	Free
2	Grid 1
3	Cathode, Grid 3
4, 5	Heater
7	Plate
9	Grid 2

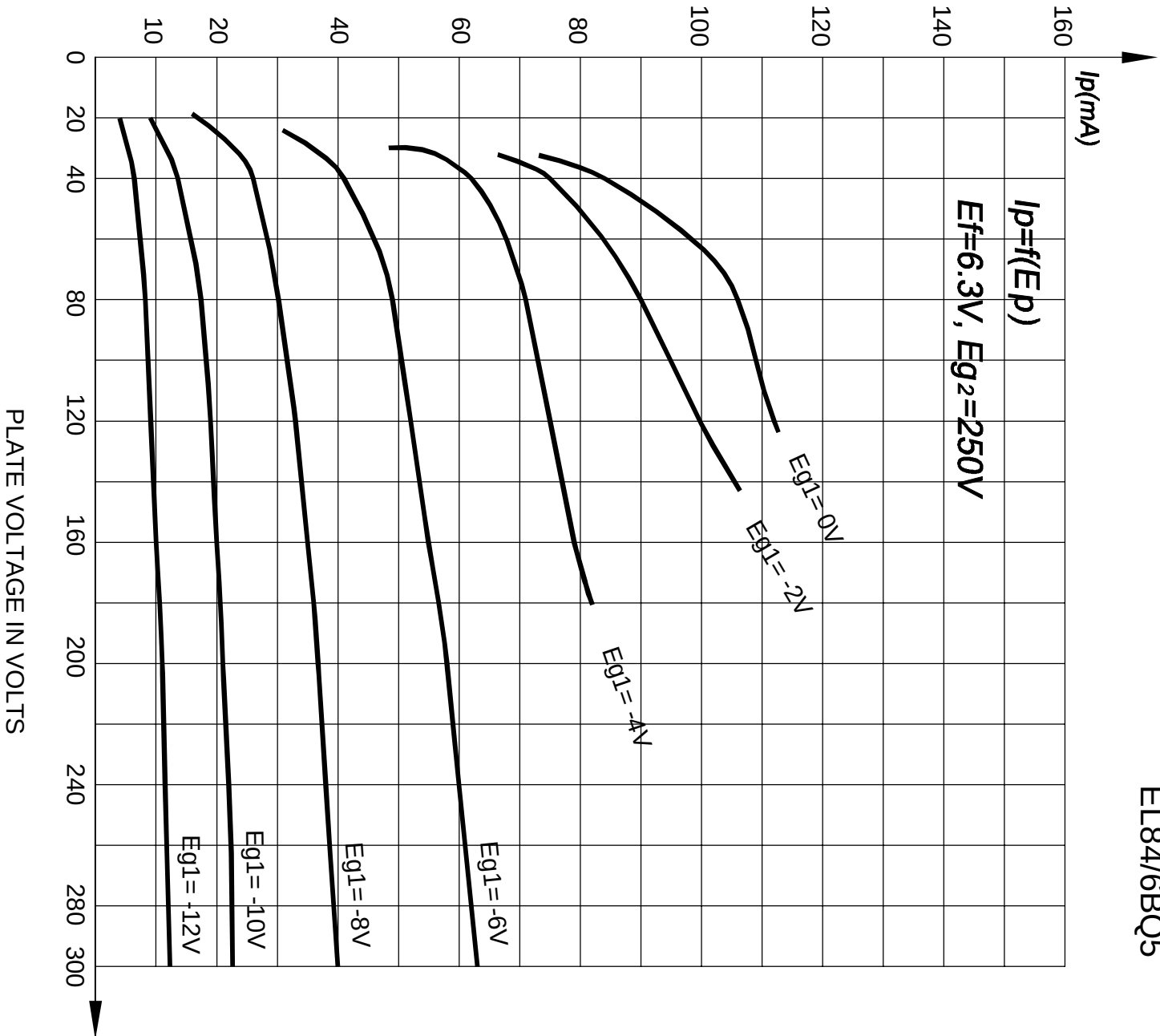
Electrical parameters

EL84/6BQ5

Parameters, conditions and units	Nominal	
	min	max
First grid reverse current, μA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, first grid circuit resistance 0.51 M Ω)	—	1.0
Heater current, mA	700	840
Plate current, mA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	30	60
Second grid current, mA (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	—	8.5
Output power, W (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, plate circuit resistance 5.2 k Ω alternating first grid, efficacious 5.2 V)	3.0	—
Output power at low voltage, W (at: filament voltage 5.7 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, plate circuit resistance 5.2 k Ω first grid alternating voltage, efficacious 5.2 V)	2.0	—
Slope of characteristic, mA/V (at: filament voltage 6.3 V plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V)	9.0	—
Distortion factor, % (at: filament voltage 6.3 V, plate voltage 250 V, first grid voltage minus 7.3 V, second grid voltage 250 V, plate circuit resistance 5.2 k Ω alternating first grid, efficacious 5.2 V)	—	17
Cahtode - heater insulation resistance, M Ω (at: filament voltage 6.3 V cathode -heater voltage ± 100 V)	5.0	—

Limiting Values

Parameters, units	Nominal	
	min	max
Filament voltage, V	5.7	7.0
Plate voltage, V	—	300
Second grid voltage, V	—	300
Cathode - heater voltage, V	—	100
Cathode current, mA	—	65
Power dissipation at the plate, W	—	14
Power dissipation at the second grid, W	—	2.2
First grid circuit resistance, M Ω self - bias	—	1.0
fixed bias	—	0.51
Temperature at the most heated part of the envelope, K°	—	493

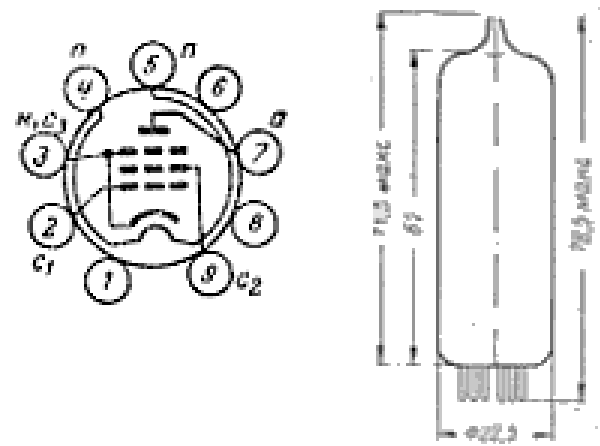


6P14P, 6P14P-V, 6P14P-EV

(6n14n, 6n14n-B, 6n14n-EB)

General

Pentode for output stages of low frequency amplifiers.
Envelope: miniature, glass.
Mass 20 g.



General characteristics:

Type	6P14P	6P14P-V	6P14P-EV
Filament voltage, Volt	6.3	6.3	6.3
Anode voltage, Volt	250	250	250
2 nd grid voltage, Volt	250	250	250
Resistance in cathode circuit, Ohm	120	120	120

Type	6P14P	6P14P-V	6P14P-EV
Filament (heater) current, mA	760±60	760±60	760±60
Anode current, mA	48±8	48±8	48±8
2 nd grid current, mA	5	5	5
Reverse 1 st grid current, mkA	≤ 1	≤ 1	≤ 1
Dissipate cathode-heater current, mkA	≤ 25	≤ 25	≤ 25
Mutual conductance, mA/V	11.3	11.5	11.5
Output power (by R _A =5.2Kohm), W	4.2	4.3	4.3
Non-linear distortion, %	8	8	8
Internal resistance, Kohm	-	-	-
Equivalent noise resistance, Ohm			300
Inter electrode capacitance, pF: input	11	11±2.5	11±2.5
output	7	8±2	8±2
transfer	≤ 0.2	0.75-0.4	0.75-0.4
Operation time, h	3000	1000	5000

Limited operating values:

Type	6P14P	6P14P-V	6P14P-EV
Filament voltage, V	5,7-7	5,7-7	5,7-7
Anode voltage, V	300-400	300-500	300-500
2 nd grid voltage, V	300	300-500	300-500
Cathode - heater voltage, V	100	200	200
Cathode current, mA	65	65	65
Anode dissipation, W	14	14	14
2 nd grid dissipation, W	2.2	2	2
Resistance in 1 st grid circuit, MOhm	1	1	1

Operating environmental conditions :

Type	6P14P	6P14P-V	6P14P-EV
Acceleration of vibration loads, g	2.5	6	10
by frequencies, Hz	50	5-600	5-600
Acceleration of multiple impacts, g	35	150	150
Acceleration of single impact, g	--	300	300
Ambient temperature, °Ñ	-60 to +70	-60 to +70	-60 to +70
Relative humidity at up to 40°C, %	98	98	98

Plate-grid and plate curves of 6P14P

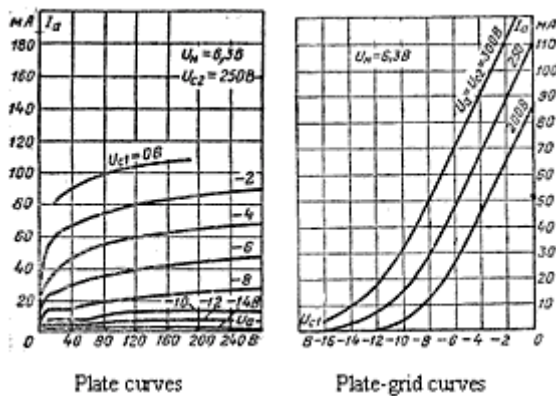


Plate-grid and plate curves of 6P14P-EV

