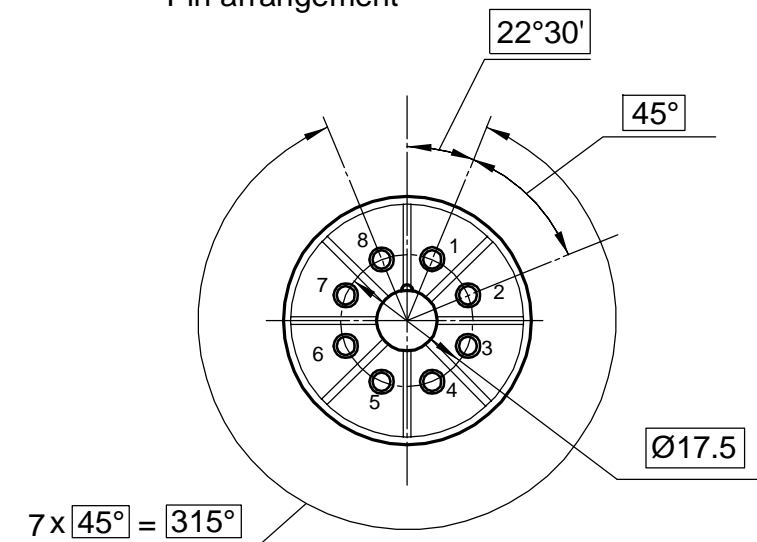
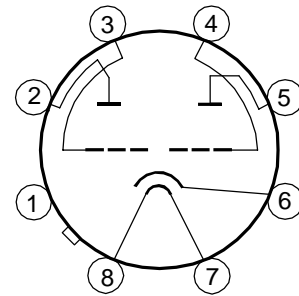


Vacuum tube 6SC7 is a twin triode with equipotential cathodes, designed to amplify low frequency voltage in radio engineering devices.

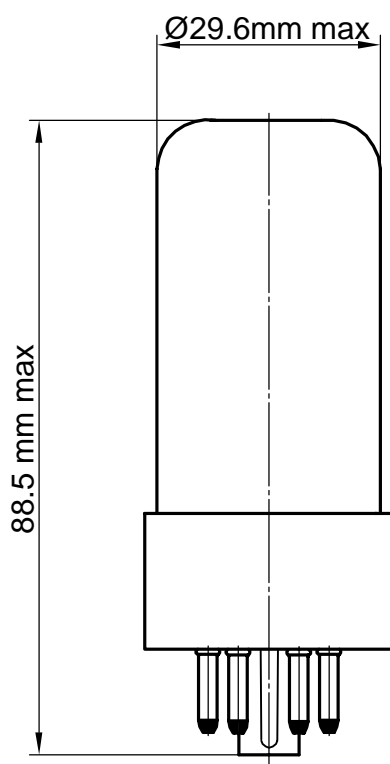
Pin arrangement



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, $\mu\text{A}$ , ( at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 2.0 V, resistance in grid circuit 1.0 M $\Omega$ ) | —       | 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, $\mu\text{A}$<br>( at: filament voltage 6.3 V, plate voltage 250 V, grid voltage minus 12.0 V )       | —       | 20  |
| Cathode - heater insulation resistance, M $\Omega$<br>( at: filament voltage 6.3 V, cathode - heater voltage $\pm 200$ 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   | —       | $\pm 200$ |
| Cathode current, mA   | —       | 10        |
| Power dissipation at the plate of each triode, W                          | —       | 1.2       |
| Grid circuit resistance for each of the triodes, M $\Omega$<br>fixed bias | —       | 1.0       |
| self - bias   | —       | 2.0       |
| Temperature at the most heated part of the envelope, K $^{\circ}$         | —       | 363       |

