



# SVETLANA TECHNICAL DATA

## GP-5 Beam Triode



The Svetlana™ GP-5 is a glass-envelope beam power triode intended for use as a shunt regulator or pulse modulator in high-voltage systems. It features anode operating voltage of 30 kV and a plate dissipation of 37.5 watts. Originally intended for color-TV voltage stabilization, the GP-5 is similar to the Telefunken ED500 and may be used to retrofit equipment which uses the American type 6BK4 or other high-voltage beam triodes.

### Characteristics

#### Electrical

|                                                               |                            |         |
|---------------------------------------------------------------|----------------------------|---------|
| Cathode                                                       | oxide-coated, unipotential |         |
| Voltage (AC or DC)                                            | 6.3 ( $\pm 0.6$ )          | V       |
| Current                                                       | 210 ( $\pm 20$ )           | mA      |
| Heater-cathode voltage, peak                                  | $\pm 200$                  | V       |
| Amplification factor (nominal)                                | 2750                       |         |
| Transconductance (nominal)                                    | 700                        | $\mu S$ |
| Interelectrode capacitances (typical), with cathode grounded: |                            |         |
| Input                                                         | 4.0                        | pF      |
| Output                                                        | 1.5                        | pF      |
| Feedback                                                      | $\leq 0.1$                 | pF      |

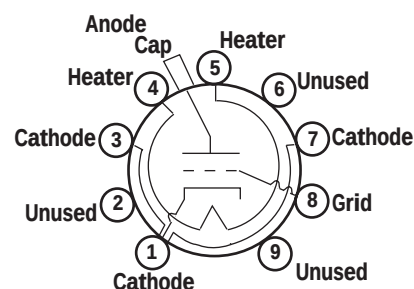
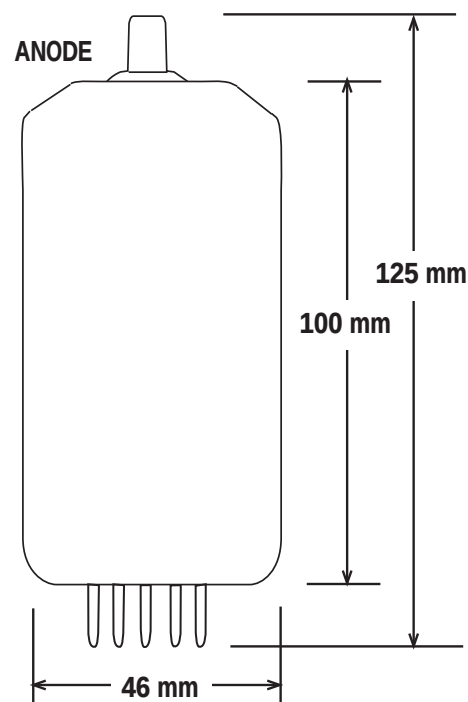
#### Mechanical

|                            |                                       |
|----------------------------|---------------------------------------|
| Base                       | standard magnoval, glass button       |
| Basing diagram             | see below                             |
| Socket                     | Svetlana SK509 or similar             |
| Anode cap                  | approx. 3/8 in (9 mm) diameter        |
| Anode connector            | same as 6BK4 or 807                   |
| Operating position         | Any (vertical for convection cooling) |
| Nominal dimensions:        |                                       |
| Height of glass envelope   | 100 mm (3 7/8 in)                     |
| Diameter of glass envelope | 46 mm (1 3/4 in)                      |
| Overall height             | 125 mm (4 7/8 in.)                    |
| Net weight                 | 115 g                                 |

#### Maximum ratings

|                                 |           |    |
|---------------------------------|-----------|----|
| Anode voltage                   | 30,000    | V  |
| Anode dissipation               | 37.5      | W  |
| Anode current, continuous       | 2.0       | mA |
| Grid voltage                    | -450      | V  |
| Maximum grid-circuit resistance | 3 megohms |    |
| Envelope temperature            | 250       | °C |

### Svetlana Outline drawing



**Svetlana**  
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