The Svetlana™ 6D22S is a glass-envelope power diode for use as a half-wave B+ rectifier in high-quality audio amplifiers. Originally intended for color-TV damper-diode service, the 6D22S is similar to the 6DL3 except for base connections and some ratings. The 6D22S features very slow warmup (30 seconds typical), making it an excellent, rugged power-on delay device for audio amplifiers. Its warm-up time is longer than that of common rectifier tubes (such as the 5AR4/GZ34), and it is lower in cost than electronic delay relays.

Its heater may be operated from the same supply as other tubes in amplifier, up to Vb=600 volts. Its high pulse current capability gives sound quality which is superior to commonly-used rectifier tubes.

### Characteristics

**Electrical**

- **Cathode**: Oxide-coated, unipotential
- **Voltage (AC or DC)**: 6.3 volts AC or DC (±0.6 volts)
- **Current**: 1.9 Amps
- **Heater-cathode voltage**: +200 volts, -600 volts, continuous
- **Interelectrode capacitances (typical)**:
  - Anode to cathode: 12.0 pF

**Mechanical**

- **Base**: Standard 9-pin magnoval, glass button
- **Basing diagram**: See below
- **Socket**: Svetlana SK509 or similar
- **Cathode connector**: 1/4" sweep-tube size (Svetlana PC509 or similar)
- **Operating position**: Any (vertical for convection cooling)

**Nominal dimensions**:

- **Height of glass envelope**: 76.0 mm (2.99 in.)
- **Diameter of glass envelope**: 28.5 mm (1.12 in.)
- **Overall height**: 95 mm (3.74 in.)
- **Net weight**: 80 g (2.82 oz.)

**Maximum ratings**

- **Peak inverse anode voltage**: 6000 V
- **Peak anode current**: 1 A
- **Anode current, continuous**: 300 mA
- **Anode dissipation**: 11 W
- **Envelope temperature**: 200°C

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**Svetlana Outline drawing**

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1, 3, 6, 8 Anode
2, 7, 9 No Connection
4, 5 Heater
K Cathode (top cap)
Svetlana designs and builds audio tubes modeled after the great American and European designs. Strict Russian Military standards and quality control give these tubes the sound you want and the quality you expect from Svetlana.

Visit our extensive web site where you will find a wealth of information about all the Svetlana products. From complete data sheets of each tube to "Technical Bulletins" for popular RF and audio tube applications, this site offers the most comprehensive downloadable tube library in the industry. Online help is just a click away. Visit the "Ask the Experts" section and get direct answers to your most pressing tube questions. Our experts cover the whole tube spectrum: Broadcast, Industrial/Scientific/Medical, Communications, Amateur Radio, HiFi and Guitar. But that's not all. Use the Svetlana Home Page as a jumping-off point to browse the industry's best web sites. The list of "Related Web Sites" is even broken down into categories so your search is directly related to what you're looking for. The "What's New" section keeps you posted on the very latest developments from the Svetlana factory in Russia and the "Distributors" section will show you exactly where to get the Svetlana products you've been hearing about.

www.svetlana.com