

# SVETLANA TECHNICAL DATA

## SV300B

### Low-Mu Audio Power Triode



**T**he Svetlana SV300B is a power triode intended for use in class A, AB or B audio amplifiers. It is one of the lowest-distortion tubes ever made, and is a close duplicate of the original Western Electric™ 300B.

The Svetlana SV300B uses ultra-pure carbonized nickel plate material and a proprietary oxide coating on the filament to give Western Electric™-like performance. The internal structure is well-supported and is aligned with respect to the base pins to avoid internal shorts in equipment designed for horizontal tube mounting. The filament is center-tapped to insure low hum.

The Svetlana SV300B is manufactured in Russia at the Svetlana factory in St. Petersburg. The strict manufacturing and quality controls at the Svetlana plant assure functionality and sound as good as Western Electric™ manufactured products.

#### Characteristics

##### Electrical

Filament:	Oxide-coated tungsten	
Voltage (AC or DC)	5.0±0.3	V
Current	1.2	A
Amplification factor	3.85	
Transconductance	5500	μS
Plate resistance	700	ohms
Interelectrode capacitances (typical), with filament grounded :		
Grid to plate	15	pF
Grid to filament	9	pF

##### Mechanical

Cooling	Radiation and convection
Base	standard small four pin
Basing diagram	JEDEC 4D
Socket	Svetlana SK4A or equivalent

##### Operating position:

Axis vertical, base down or horizontal with pins 1 and 4 in horizontal plane

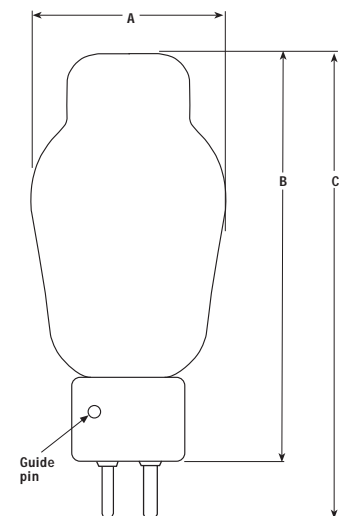
##### Nominal dimensions:

Diameter	59.0mm (2.3125 in)
Base to top	137.2 mm (5.4063 in)
Overall height	152.5 mm (6.0 in)
Net weight	90 gm

##### Maximum Ratings

DC plate voltage	450	V
Maximum signal DC plate current	100	mA
Plate dissipation	40	W

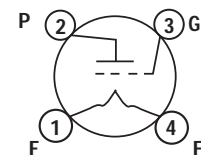
#### Svetlana Outline drawing



#### Dimensional Data

Dim.	Millimeters	Inches
A	59.0	2.3125
C	152.5	6
B	137.2	5.4063

#### Base pin connections bottom view



1 Filament  
2 Plate

3 Grid  
4 Filament



**Svetlana**  
ELECTRON DEVICES

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# Svetlana SV300B Low-Mu Audio Power Triode



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## Typical Operation, Class A, Audio Amplifier

Plate voltage	450	V
Grid voltage	-100	V
Peak grid drive	200	VP-P
Plate current, no signal	60	mA
Plate current, max signal	65	mA
Effective load resistance	5500	ohms
Distortion at 1 watt into 8 ohms	0.10	%
Power output at 5% distortion	10	W

\*Notes: The internal structure is aligned with respect to the base pins to avoid internal shorting problems in equipment designed for horizontal mounting.

