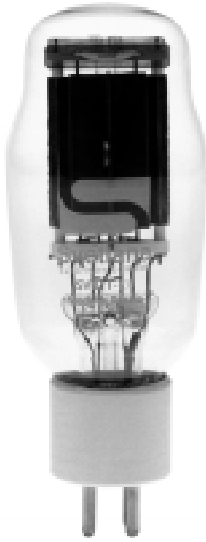


# SVETLANA TECHNICAL DATA

## SV811-3

### Low-Mu Power Triode



The Svetlana™ SV811-3 is a power triode intended for use in class A, AB, or B audio amplifiers. This tube features:

- Directly heated thoriated tungsten filament for soft glow and warm sound.
- Hard glass envelope with white ceramic base
- Low microphonic internal construction
- Titanium gettering system
- Tri-plate anode
- Superb aesthetic appearance

#### Characteristics

##### Electrical

Filament:	Thoriated-tungsten
Voltage (AC or DC)	6.3 ± 0.3 V
Current	4 A
Amplification factor	3.5
Transconductance	1700 μS
Plate resistance	2000 ohms
Interelectrode capacitances (typical), with filament grounded:	
Grid to plate	8 pF
Grid to filament	7 pF

##### Mechanical

Cooling	Radiation and convection
Base	Ceramic, four pin, small
Basing diagram	JEDEC 4D
Socket	Svetlana SK4 or equivalent
Operating position-	Axis vertical, base down or horizontal w/ pins 1 and 4 in vertical plane

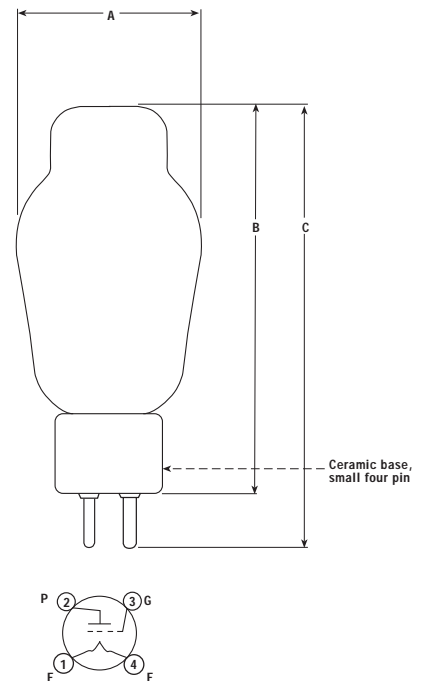
##### Nominal dimensions:

Diameter	57 mm (2.23 in.)
Base to top	133 mm (5.25 in)
Overall height	150 mm (5.89 in)
Net weight	100 g

##### Maximum ratings

DC plate voltage	800 V
Maximum-signal DC plate current	160 mA
Plate Dissipation	65 W
Grid Current	50 mA

#### Svetlana Outline drawing



#### Notes:

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

- |            |            |
|------------|------------|
| 1 Filament | 3 Grid     |
| 2 Plate    | 4 Filament |

#### Dimensional Data

Dim.	Millimeters	Inches
A	57	2.23
B	133	5.25
C	150	5.89



**Svetlana**  
ELECTRON DEVICES

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# Svetlana SV811-3 Low-Mu Power Triode



**Svetlana**  
ELECTRON DEVICES

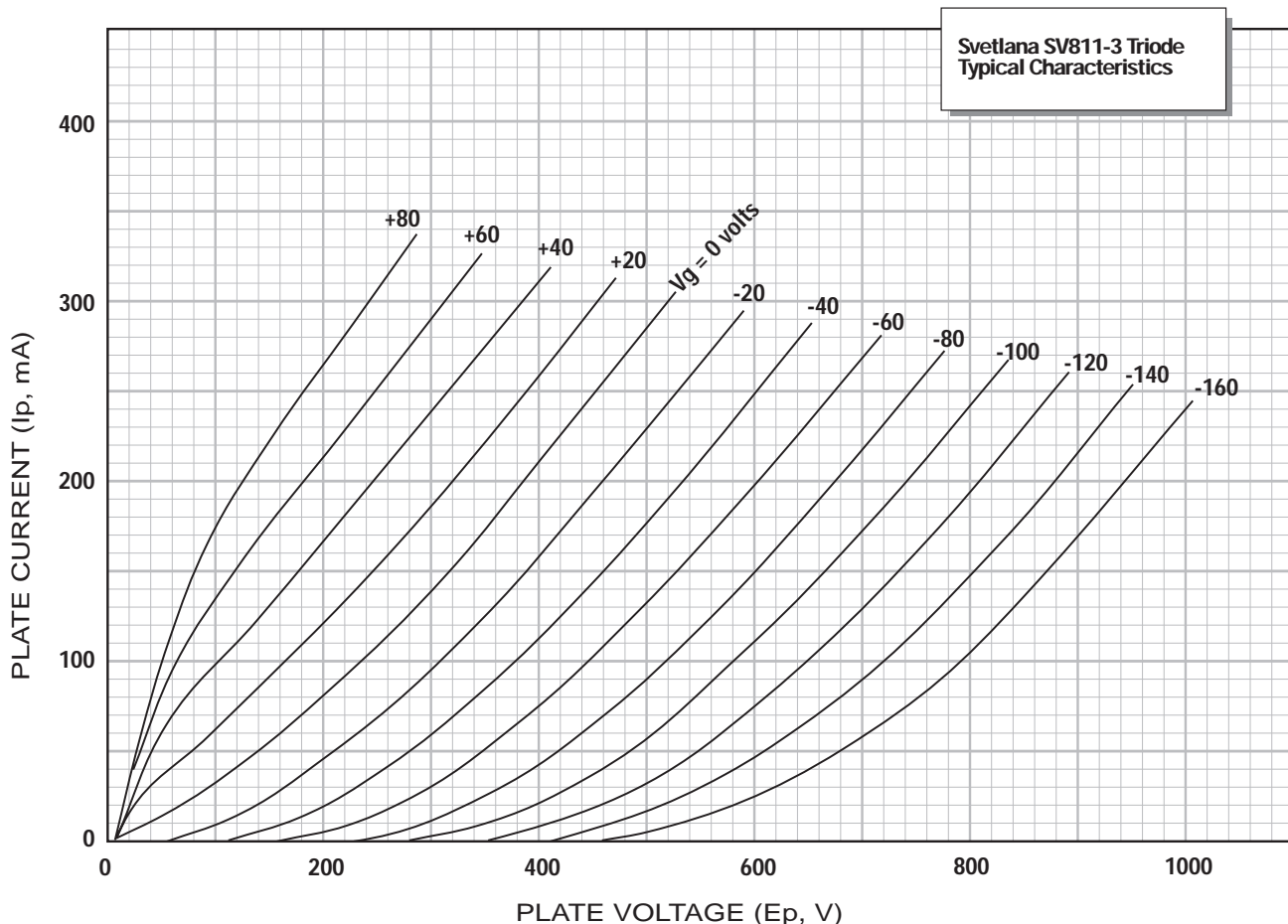
## Typical Operation, Single Tube, Class A

Class of Operation	A1	A1	A2	
DC plate voltage	450	800	450	V
Grid voltage	-65	-165	-65	V
Peak grid drive	130	30	280	V P-P
DC plate current, zero signal	80	80	80	mA
DC plate current, max signal	83	90	105	mA
Plate load resistance	5000	5000	5000	Ohms
Distortion at max output	0.2	1.0	1.0	%
Power output at distortion above	3.2	15.4	12.4	W

## Typical Operation, Push-Pull, Two Tubes

Class of Operation	AB1	AB1	AB2	
DC plate voltage	450	750	750	V
Grid voltage	-80	-178	-178	V
Peak grid drive, grid to grid	328	720	880	V P-P
DC plate current, zero signal	150	150	150	mA
DC plate current, max signal	155	215	238	mA
Plate load resistance	9600	9600	9600	Ohms
Distortion at max output	0.12	3.0	5.0	%
Power output at distortion above	10	49	66	W

(Note: allow for contact potential and secondary emission in grid biasing.)



Note: A  $\mu$  of 10 version of this tube type is available, the SV811-10