

# Ales Vaic Vacuum Technology

## AV 302B SL Datasheet

- LAST PRODUCTION WAS IN 2001 -

**Near Replacement:**

[EML 320B-XLS](#)

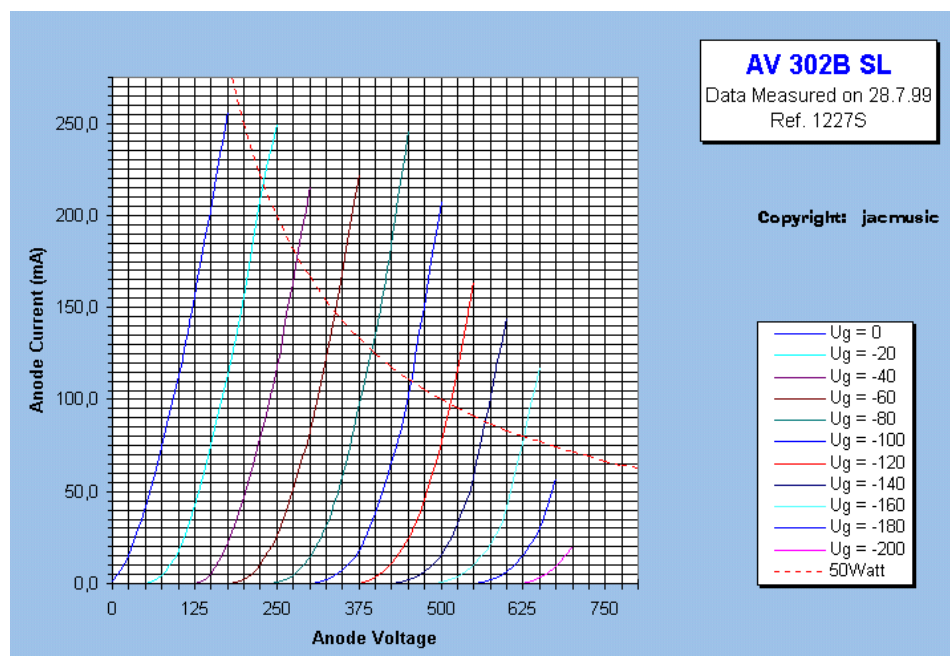
This tube is an AV300B SL with extra cooling plates, and larger filaments. It will operate like a normal 300B, but needs more filament current. This tube will give more impulse power in Class A, or can be used in OTL applications.

### Features

- This tube uses AVVT's unique Super-Linear Patent ([Note1](#))
- AVVT's patented ribbon filaments with 16 flat Surfaces, for more linearity
- Two extra large getters
- Unbreakable Hard-Glass. Bulb is larger sized than normal 300B.
- Anti-microphonic Suspension in Tube Top
- All 1999 (and later) AVVT tubes use unbreakable hard-metal filaments. ([Note2](#))
- Ceramic UX4 Socket with Gold Plated pins



AV 302B SL in C37 Version ([Enlarge](#))



AV 302B SL Filament Ratings	
Filament Voltage	5 Volt (AC or DC)
Filament Current	2.2 Ampere

AV 302B SL Maximum Conditions <a href="#">(See also Note 3)</a>	
Plate Voltage	550Volt
Plate Current	200mA
Plate Dissipation	50Watt
Power Output in Class A	21Watt

AV 302B SL Typical Data <a href="#">(See also Note 4)</a>	
Plate Voltage	350V
Plate Dissipation	50 Watt
Plate Current	140mA
Grid Voltage	-65Volt
Plate Impedance	530 Ohm
Amplification Factor	3,5
Transconductance	6.6 mA/V
Load Impedance	1500 - 3500Ohm
Grid resistor	50k Ohm
Operating Lifetime	40.000 hours

AV 302B SL Mechanical Data	
Size	170 x 65mm (Includes Socket)
Weight <a href="#">Standard Version</a>	185 Grams
Weight <a href="#">C37 Version</a>	178 Grams

For further information about our products, please visit <http://www.jacmusic.com>

Note 1) **Super Linear** plates are based on an exclusive AVVT patent. The cold ends of the filaments do not have a very good function, and cause distortion. This tube has four cavities inside the plate, that cover the cold ends of the filaments. These cavities are covered by four nickel plates, that you can see from the outside. Within these cavities, plate current will not be able to flow, and this disables the emission of the cold end of the filaments.

Note 2) **Hard-metal filaments** are operated at much higher temperature than normal tubes. This tube will glow bright orange, instead of the dark orange color of nickel filament tubes.

Note 3) **Individual Test data**, such as: Matching Data, Grid Current, Vacuum, Filament Current, etc., are on the Certificate that comes with each individual Tube. Each tube has is numbered, inside the bulb with a metal [Tag](#)

The AV 302B SL can withstand the maximum power dissipation continuously.

Note 4) **Typical Data** are chosen higher as for the 300B. When operated at lower power level, refer to typical data of the 300B for  $\mu$ , transconductance, and Plate Resistance. You can test this tube with normal 300B settings. (Check if the tube tester will still give 5V filament voltage at 2.2 Amps).

Tube picture with courtesy of Dieter Ennemoser