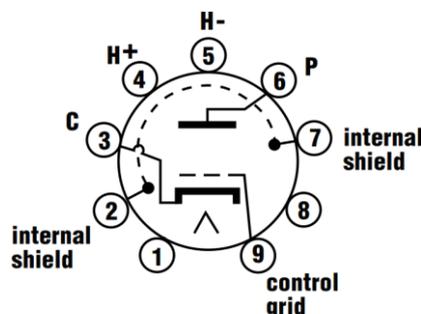




TYPE: EF86 TRIODE B9A LOW-NOISE TYPE FOR MICROPHONES

The Phædrus Audio EF86 TRIODE Supertube™ is manufactured especially for low-noise, low-microphony applications in microphones. The device matches the dimensions and performance parameters of the original tube (operated as a triode) and is supplied as a standard B9A substitute device.



For more information contact: sales@phaedrus-audio.com

EF86 TRIODE Supertube™ Technical Specifications

Heater voltage (current): 6V to 12V DC (85mA @ 6.3V)

V(a) max: 250V

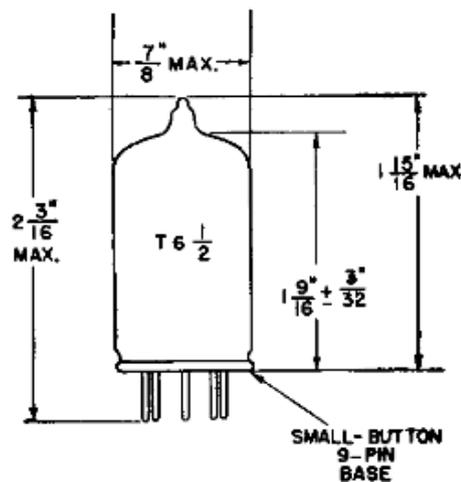
g_m : 2mA/V

r_a : 16k Ω

Notes:

1. The internal shield connection must be connected directly to ground. It must NOT be left floating.
2. The heater pin polarity is important. H+ (pin 4) must be positive w.r.t. H- (pin 5). See application note on heater power supplies.
3. Pins 1 and 8 may be strapped to anode on the tube socket, there is no internal connection to these pins.
4. May be operated with grid or cathode bias.

PHYSICAL DIMENSIONS



EIA 6-2



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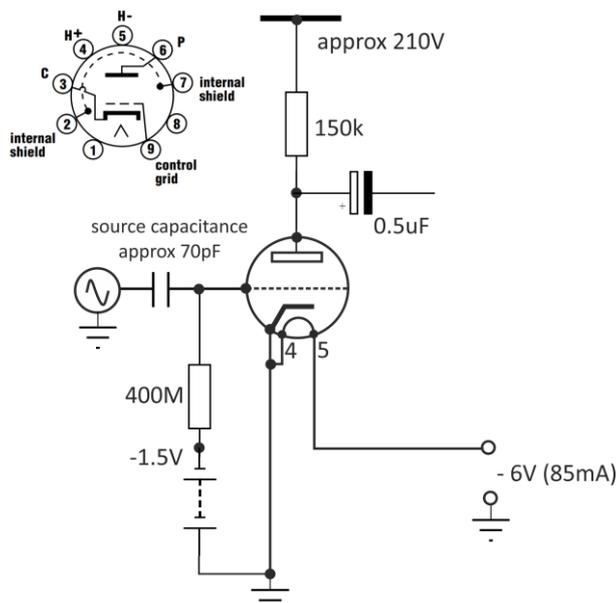


Before using a Phædrus Audio Electronic Tube, please read carefully the specifications and applications information in the datasheet. Improper installation or failure to respect parameter limits may cause damage to the component, modify its characteristics and decrease reliability and useful life. Phædrus Audio's Limited Warranty does not extend to any Phædrus Audio product that has been damaged or rendered defective due to accident, misuse, or abuse. See http://www.phaedrus-audio.com/phaedrus_t&cs.htm for Phædrus Audio's latest Terms and Conditions.



TYPE: **CV4085** (Special EF86)
B9A LOW-NOISE TYPE
FOR MICROPHONES

TYPICAL APPLICATION



HEATER CIRCUIT

The voltage polarity of the heater pins in the **Phædrus Audio EF86 TRIODE Supertube™** must be respected. Pin 4 must be positive with respect to pin 5. However, the heater is isolated from the main circuit so that, for example, pin 5 may be -6V with pin 4 grounded (as illustrated above). Or, pin 4 may be +6V with pin 5 grounded.

The heater current in the **Phædrus Audio EF86 TRIODE Supertube™** is below that on the real EF86 to keep internal dissipation down. Because the heater supply in the Neumann microphones (and others) is derived from a RC filter chain, reduced heater current results in increased heater volts. In the case of the Neumann U67 microphone, variable resistor R4 in the NU-67 power supply may be adjusted to bring this voltage back down to around 6V (the exact value isn't critical).



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