

ER300B Vacuum Tube



Classification: Moderate power, filamentary triode for Class A service

Application: Audio-frequency amplifier

Filament voltage: 5V AC or DC (+/-5% DC recommended)

Filament current: 1.2A

The filament of this tubes are designed to operate on a voltage basis and should be operated at as near the rated voltage as possible.

Average characteristics (Anode voltage 300V/ Grid bias voltage -59V)

Plate current: 60mA

Amplification factor: 3.3

Plate resistance: 950 Ohms

Grid to plate transconductance: 3300 micromhos

Grid current: <math><0.2\mu\text{A}</math>

Limiting operating Conditions for safe Operation

Maximum plate voltage: 600V

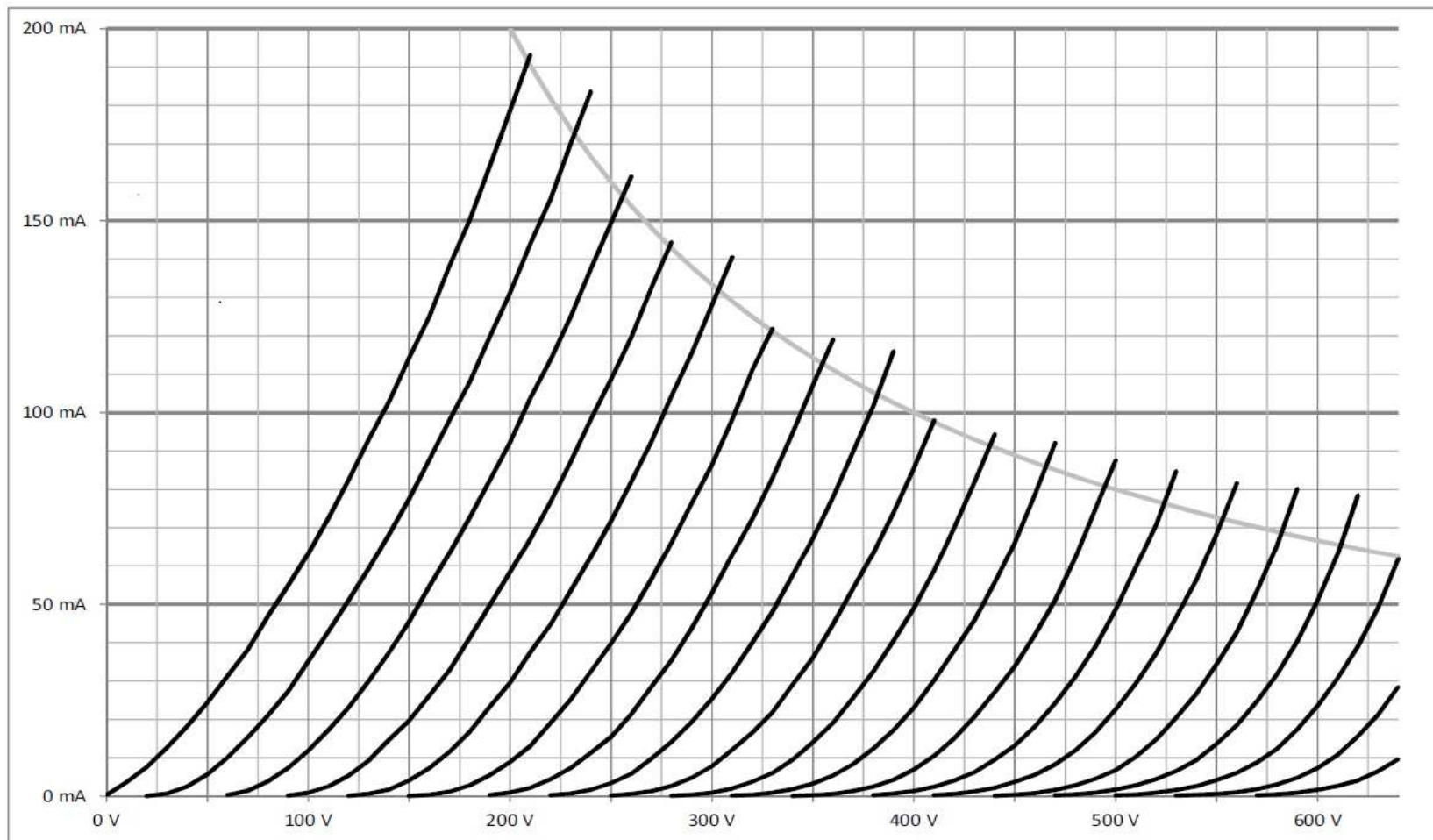
Maximum plate dissipation: 40W

Maximum plate current: 100mA

Operating Conditions for class A1

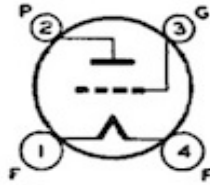
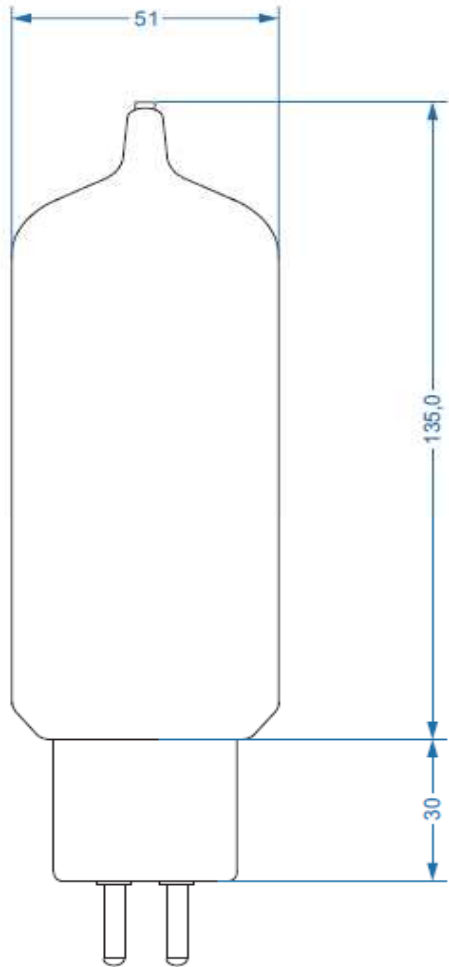
The peak value of the sinusoidal input voltage for each point is numerically equal to the grid biasing voltage at that point.

Plate Voltage	Grid Bias	Plate Current	Load Resistance	Power Output	H2	H3	H2 @ 1W	H3 @ 1W
300 V	-59 V	60mA	2500 Ohms	2.9 W	-23.7 dB (6.53%)	-35.3 dB	-31.4 dB (2.69%)	-48.9 dB
			3500 Ohms	3.7 W	-30.0 dB (3.16%)	-44.0 dB	-41.9 dB (0.85%)	-66.0 dB
			5000 Ohm	2.8 W	-32.0 dB (2.59%)	-47.0 dB	-37.9 dB (1.27%)	-57.3 dB
			10000 Ohm	2.0 W	-40.6 dB (0.93%)	-63.6 dB	-44.5 dB (0.59%)	-66.4 dB
350 V	-70 V	72 mA	2500 Ohms	4.2 W	-23.3 dB (6.84%)	-34.3 dB	-33.5 dB (2.11%)	-51.8 dB
			3500 Ohms	5.4 W	-29.8 dB (3.36%)	-43.0 dB	-43.8 dB (0.65%)	-66.5 dB
			5000 Ohms	4.0 W	-31.9 dB (2.54%)	-46.2 dB	-39.8 dB (1.02%)	-59.7 dB
			10000 Ohms	2.7 W	-40.8 dB (0.91%)	-61.9 dB	-46.7 dB (0.46%)	-67.2 dB
350 V	-66 V	84 mA	2500 Ohms	4.2 W	-26.8 dB (4.57%)	-40.3 dB	-35.5 dB (1.68%)	-56.0 dB
			3500 Ohms	3.6 W	-39.5 dB (1.06%)	-68.0 dB	-45.9 dB (0.51%)	-73.5 dB
			5000 Ohms	3.8 W	-34.0 dB (1.99%)	-52.8 dB	-41.2 dB (0.87%)	-64.6 dB
			10000 Ohms	2.6 W	-41.2 dB (0.87%)	-76.5 dB	-46.1 dB (0.49%)	-77.0 dB
350 V	-63 V	95 mA	2500 Ohms	4.1 W	-29.1 dB (3.50%)	-45.3 dB	-37.1 dB (1.40%)	-59.6 dB
			3500 Ohms	3.1 W	-41.8 dB (0.81%)	-78.0 dB	-47.1 dB (0.44%)	-79.9 dB
			5000 Ohms	3.4 W	-36.6 dB (1.48%)	-59.4 dB	-42.7 dB (0.73%)	-69.0 dB
			10000 Ohms	2.4 W	-43.3 dB (0.68%)	-71.3 dB	-47.5 dB (0.42%)	-77.4 dB
400 V	-82 V	84 mA	2500 Ohms	6.1 W	-22.5 dB (7.49%)	-32.9 dB	-35.2 dB (1.74%)	-54.0 dB
			3500 Ohms	7.2 W	-29.5 dB (3.35%)	-42.4 dB	-45.3 dB (0.54%)	-67.1 dB
			5000 Ohms	5.2 W	-31.7 dB (2.60%)	-45.4 dB	-41.4 dB (0.85%)	-60.9 dB
			10000 Ohms	3.8 W	-40.6 dB (0.93%)	-60.4 dB	-48.2 dB (0.39%)	-68.3 dB
450V	-96 V	83 mA	3500 Ohms	9.4 W	-27.2 dB (4.36%)	-38.4 dB	-45.0 dB (0.56%)	-66.1 dB
			5000 Ohms	7.0 W	-29.2 dB (3.47%)	-41.3 dB	-40.9 dB (0.90%)	-60.0 dB
			10000 Ohms	5.0 W	-38.3 dB (1.21%)	-54.7 dB	-47.4 dB (0.43%)	-65.6 dB
500 V	-117 V	78 mA	5000 Ohms	8.2 W	-24.5 dB (5.95%)	-35.3 dB	-37.8 dB (1.29%)	-57.1 dB
			10000 Ohms	6.2 W	-33.5 dB (2.11%)	-48.7 dB	-43.3 dB (0.68%)	-63.5 dB



Average plate curves for grid voltage 0 to 180V (10V steps)

Maximum dimensions



Pinout Bottom View

Medium 4-Pin Bayonet