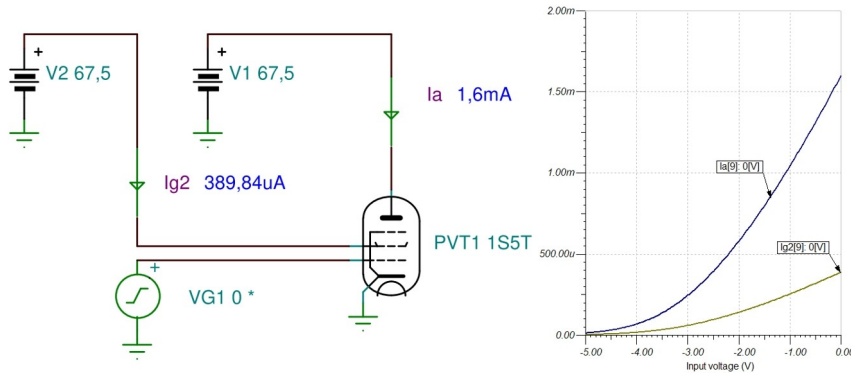
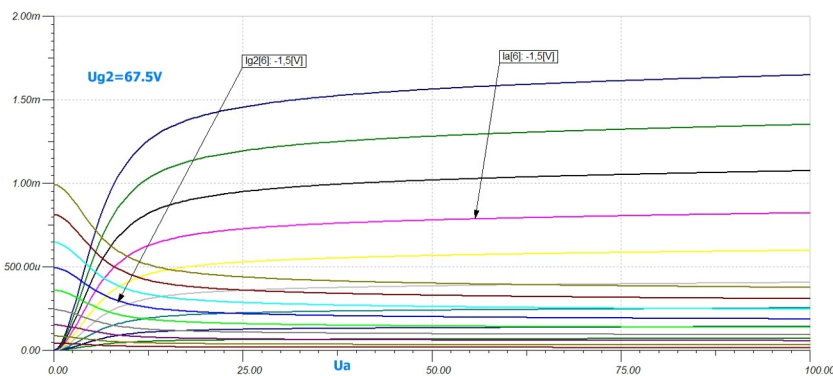


1S5T /Tungsram, Hungary/ Diode Pentode Macro Model

Pentode DC Characteristics

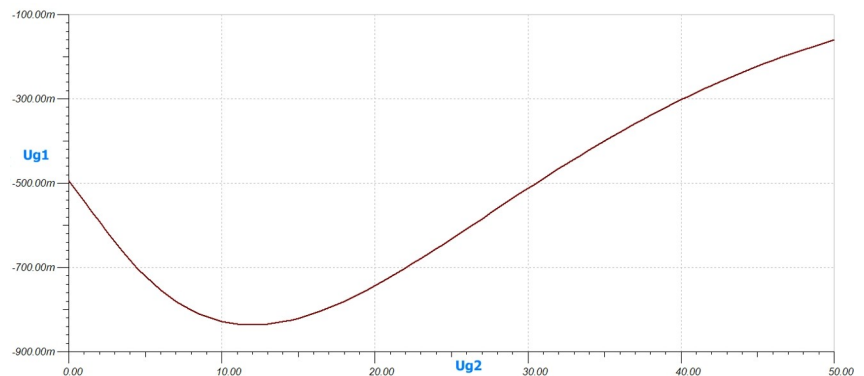
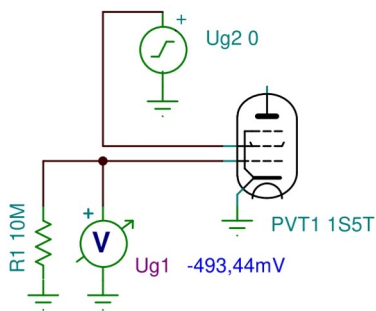


Output Characteristics

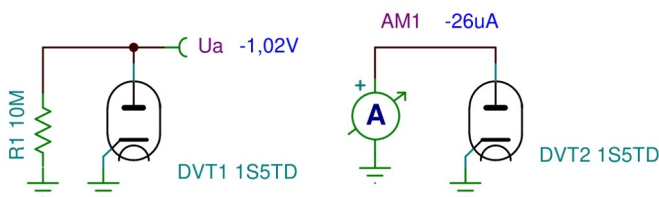


This model is valid for the following tubes (within max. ratings):
DAF91, 1S5, 1U5 (different connections)

$$U_{g1} = f(U_{g2})$$

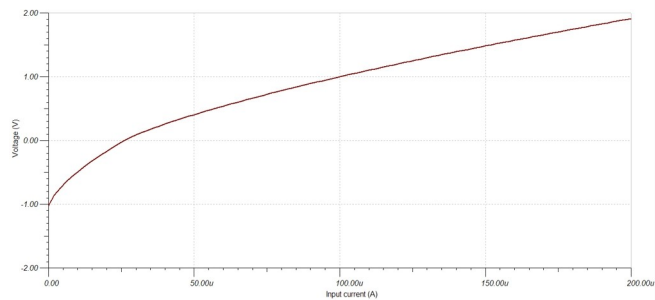
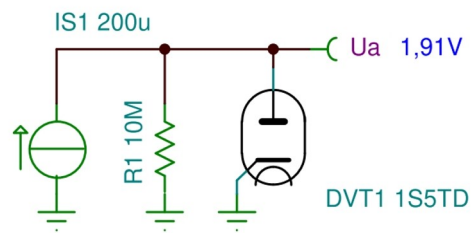


Diode Splash Current

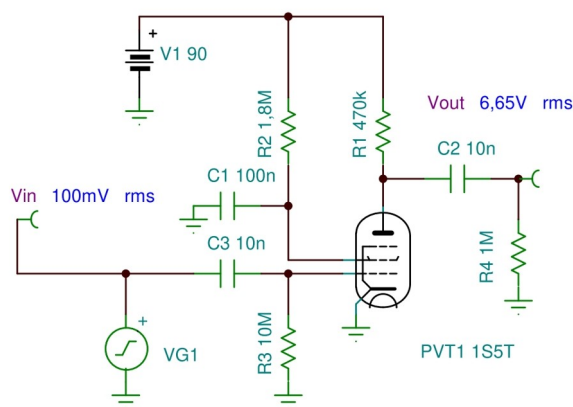
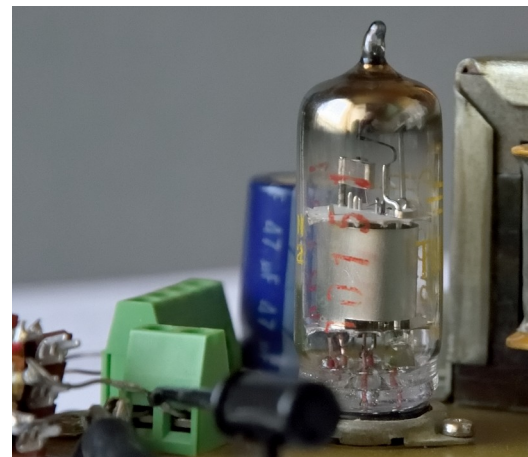
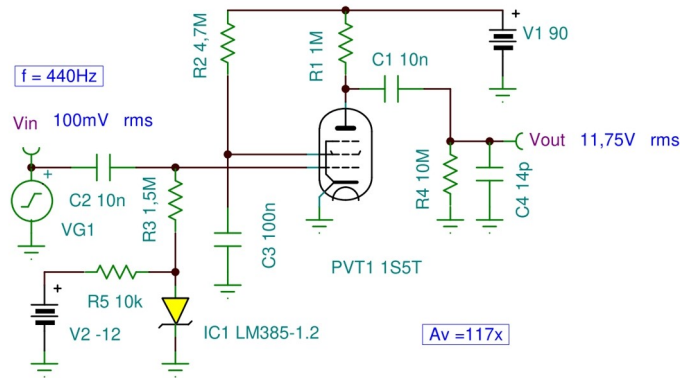
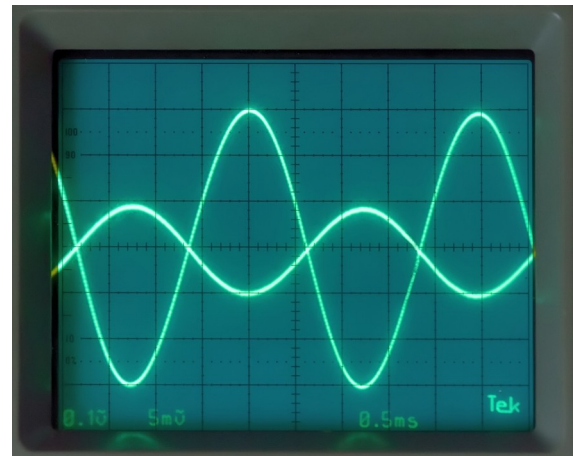
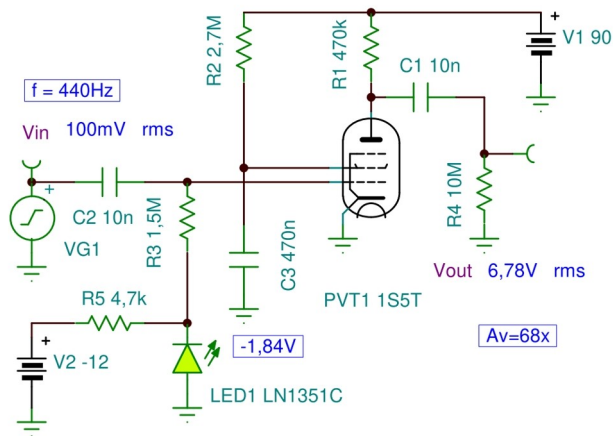


The anode current is not zero when the anode voltage is zero. A small anode current flows due to the energy distribution of the electrons emitted from the cathode.

Diode Forward Characteristics



AF Voltage Amplifiers



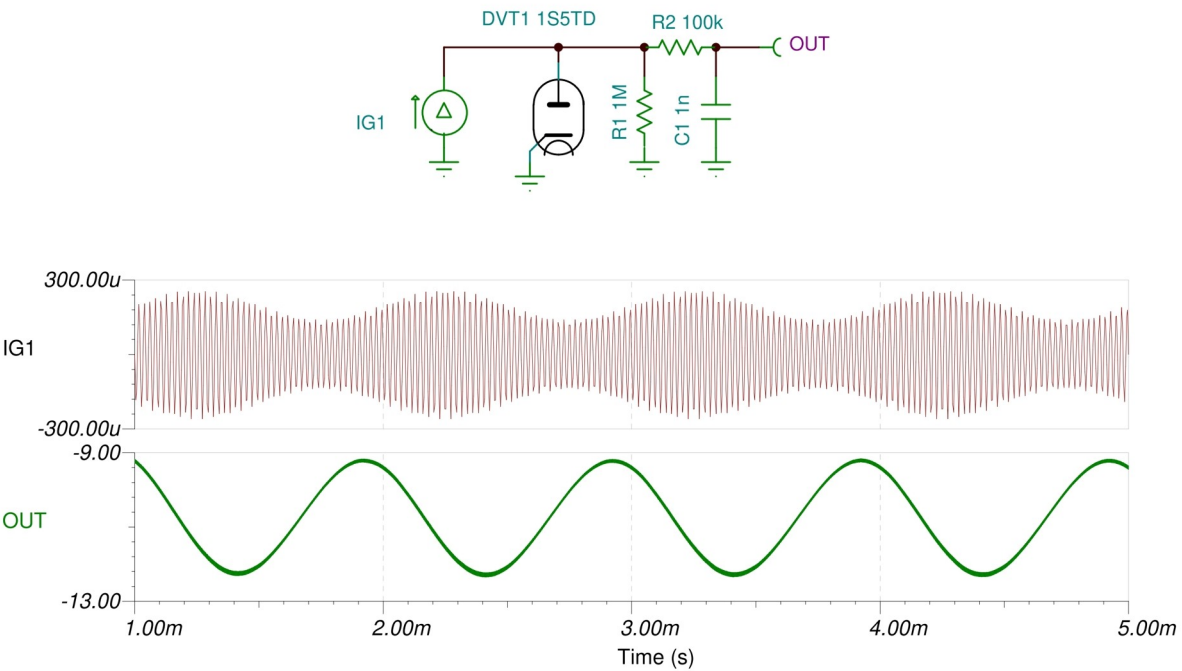
OPERATING CONDITIONS AS RESISTANCE COUPLED A.F. AMPLIFIER, CONNECTED AS PENTODE. ($V_{g1}=0$).

V_b (V)	R_a (M Ω)	I_a (μ A)	R_{gs} (M Ω)	I_{gs} (μ A)	$\frac{V_{out}}{V_{in}}$	$\frac{V_{out}}{V_{r.m.s.}}$	D_{tot} (%)	$\frac{V_{out}^*}{V_{in}^*}$	$\frac{V_{out}^*}{V_{r.m.s.}}$	R_{g1}^{**} (M Ω)
90	0.27	220	1.0	61	49	4.9	0.8	42.4	14.4	0.47
90	0.27	220	1.0	61	60	6.0	1.4	51.5	17.5	1.0
90	0.27	220	1.0	61	69	6.9	2.0	58.9	20.0	4.7
90	0.47	130	1.8	36	66.5	6.65	1.7	59	16.5	1.0
90	0.47	130	1.8	36	83.5	8.35	3.1	72.5	20.3	4.7
90	0.47	130	1.8	36	87	8.7	3.5	75	21.0	10
90	1.0	65	3.9	18.7	90	9.0	3.0	84	15.1	2.2
90	1.0	65	3.9	18.7	104	10.4	3.3	96.8	17.4	4.7
90	1.0	65	3.9	18.7	110	11.0	3.6	103.5	17.6	10

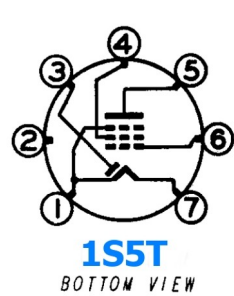
* $D_{tot}=5\%$.

** Grid resistor of following valve.

AM Diode Envelope Demodulator



BASING DIAGRAM



BASING DIAGRAM

