



**ECC82/12AU7**

ECC82 is A.F. Double Triode



**Quick reference data**

- Anode current  $I_a=10,5\text{mA}$
- Transconductance  $S=2,2\text{mA/V}$
- Amplification  $\mu=17$

**Heating**

Heating is indirect by AC od DC, with serial or parallel supply.

Heater voltage	$V_f$	6,3	12,6	(V)
Heater current	$I_f$	300	150	(mA)
pins		9-(4+5)	4-5	

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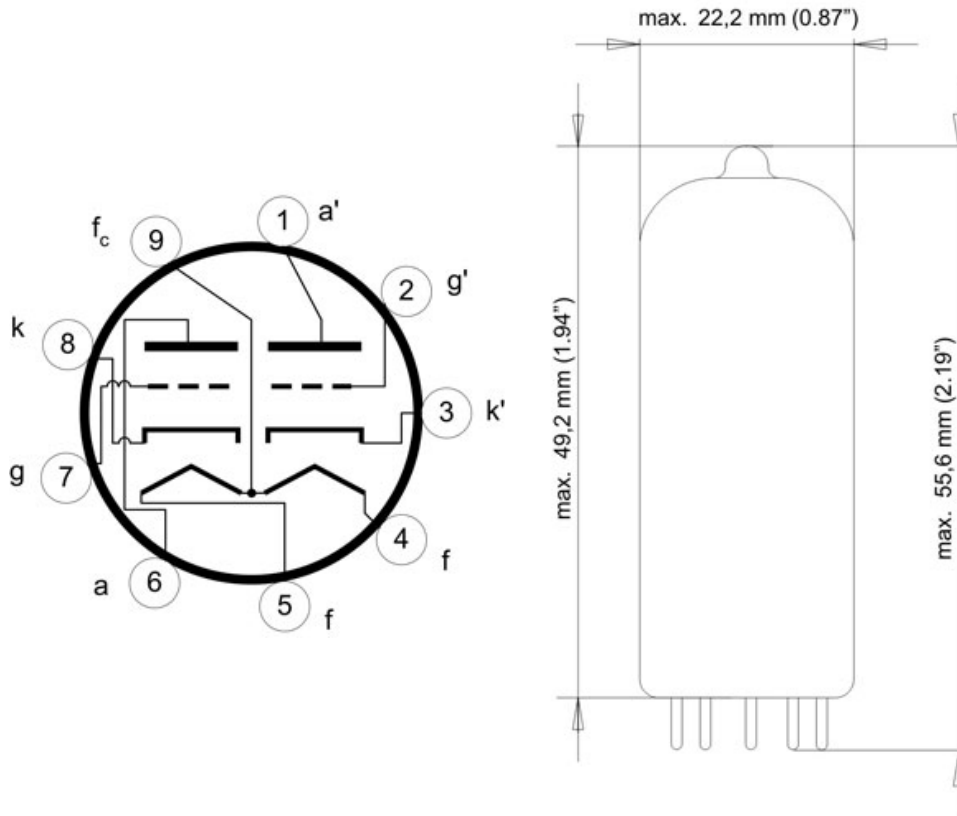
Telephone: +381 18 550 741  
FAX: +381 18 550 806  
Postal address: Bul. Sv. Cara Konstantina 80-86, 18000 Nis, Yugoslavia  
Electronic mail: [eirc@eierc.com](mailto:eirc@eierc.com)  
Web site: <http://www.eierc.com/rc/default.htm>



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**Dimensions and connections**

Base: Noval



**Typical characteristics and operating conditions**

Anode voltage	$V_a$	100	250	(V)
Grid voltage	$V_g$	0	-8,5	(V)
Anode current	$I_a$	11,8	10,5	(mA)
Transconductance	S	3,1	2,2	(mA/V)
Amplification	$\mu$	19,5	17	
Internal resistance	$R_i$	6,25	7,7	(k $\Omega$ )

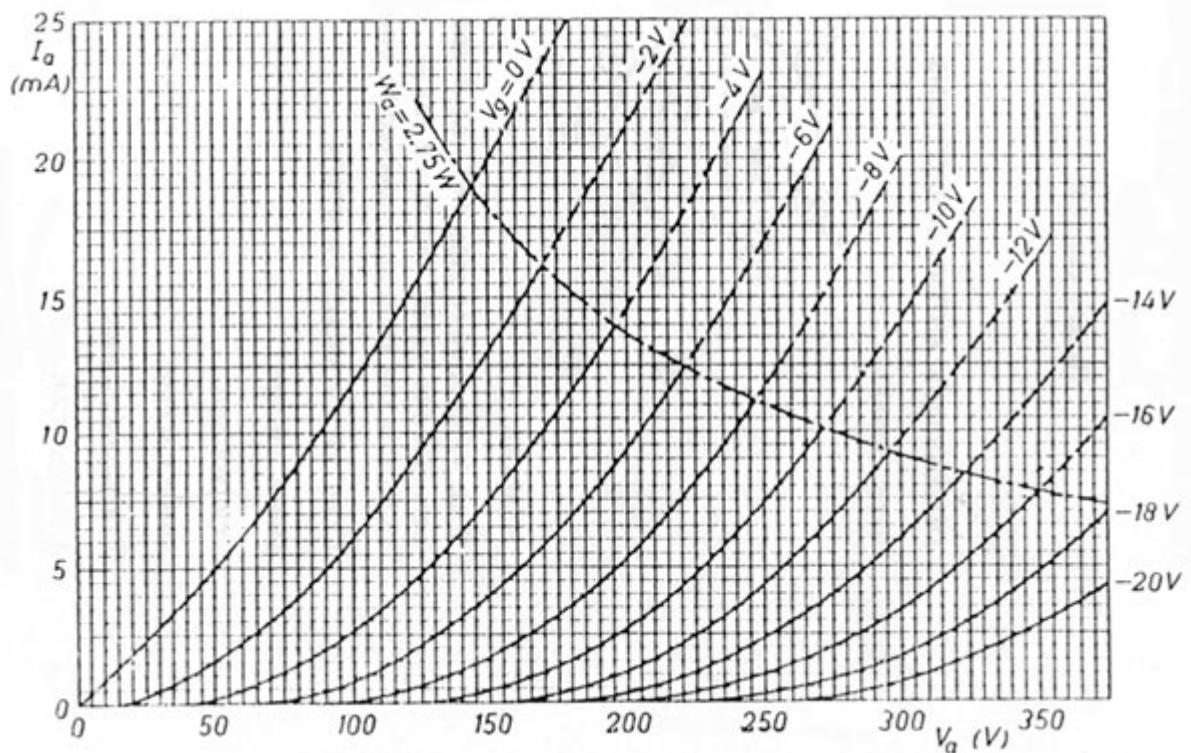
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**Limiting - maximal values (design center rating system)**

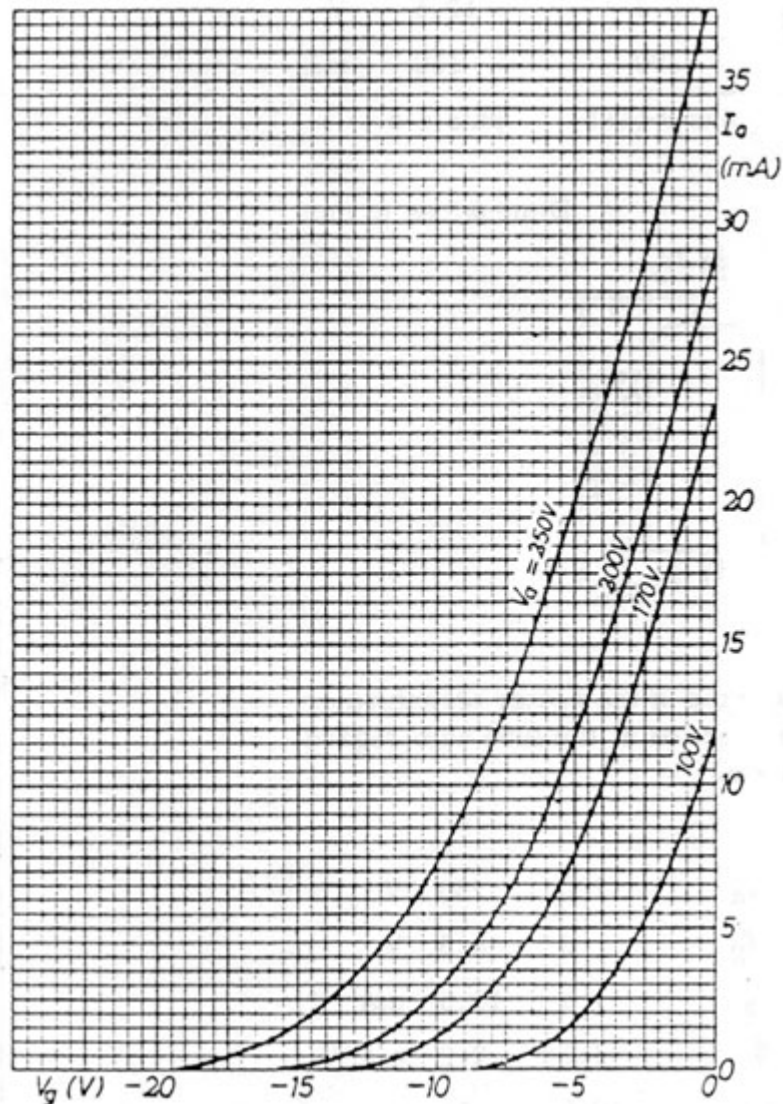
Anode voltage	$V_{ao}$	550	(V)
	$V_a$	300	
Anode dissipation	$W_a$	2,75	(W)
Cathode current	$I_k$	20	(mA)
Grid voltage	$V_g$	-100	(V)
Grid voltage, peak	$V_{gp}$	-250	(V)
Grid resistor (automatic bias)	$R_g$	1	(M $\Omega$ )
Cathode to heater voltage	$V_{kf}$	180	(V)
Cathode to heater circuit resistance in phase splitting circuits	$R_{kf}$	150	(k $\Omega$ )



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**Application note:**

This tube can be used without precautions against microphony in equipment which is characterized by  $V_i \geq 10\text{mV}$  for an output of 50mW of the output tube (or  $V_i \geq 100\text{mV}$  for 5W output), provided that average acceleration of the tube is not greater than indicated in the Section "Microphonic effect" from the "Application directions". When the center tap of the heater transformer is grounded,  $R_g \leq 0,3\text{M}\Omega$  and  $R_k$  is sufficiently decoupled, and the disturbance level from hum and noise will be better than 60dB below 100mV.

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