



ECC83/12AX7

ECC83 is A.F. Double Triode



Quick reference data

- Anode current $I_a=1,2\text{mA}$
- Transconductance $S=1,6\text{mA/V}$
- Amplification $\mu=100$

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	

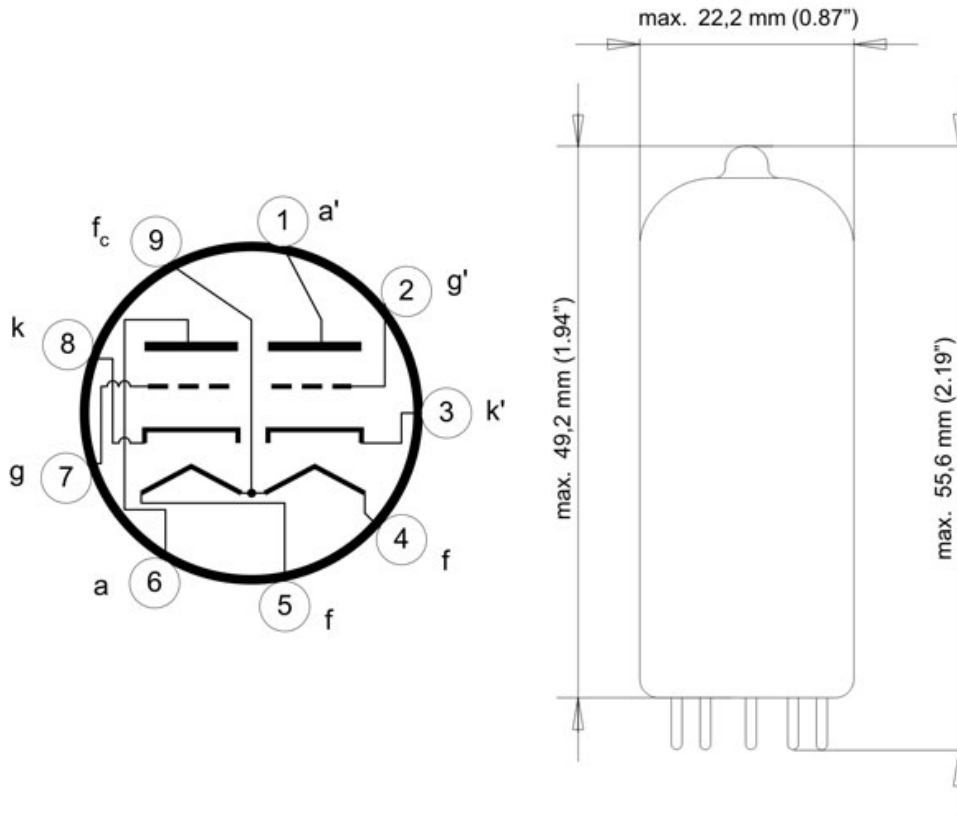
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Electronic mail: eirc@eierc.com
Web site: <http://www.eierc.com/rc>



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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	-1	-2	(V)
Anode current	I_a	0,5	1,2	(mA)
Transconductance	S	1,25	1,6	(mA/V)
Amplification	μ	100	100	
Internal resistance	R_i	80	62,5	(k Ω)

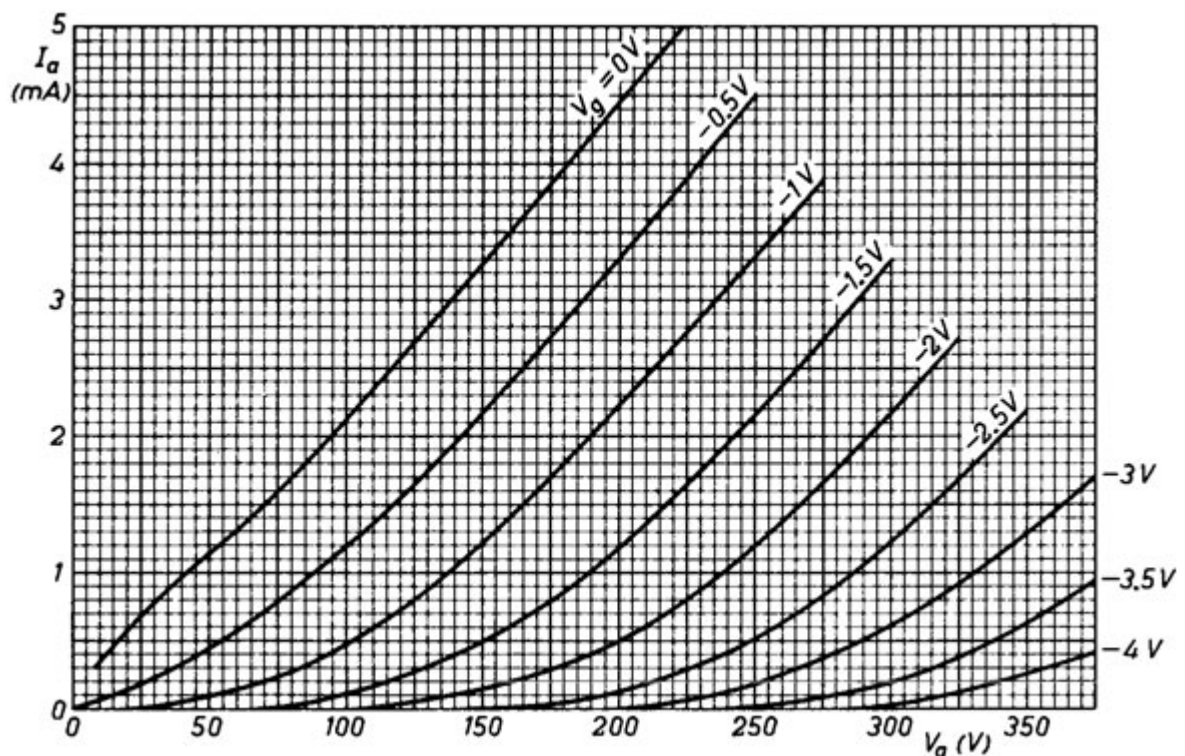
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Limiting - maximal values (design center rating system)

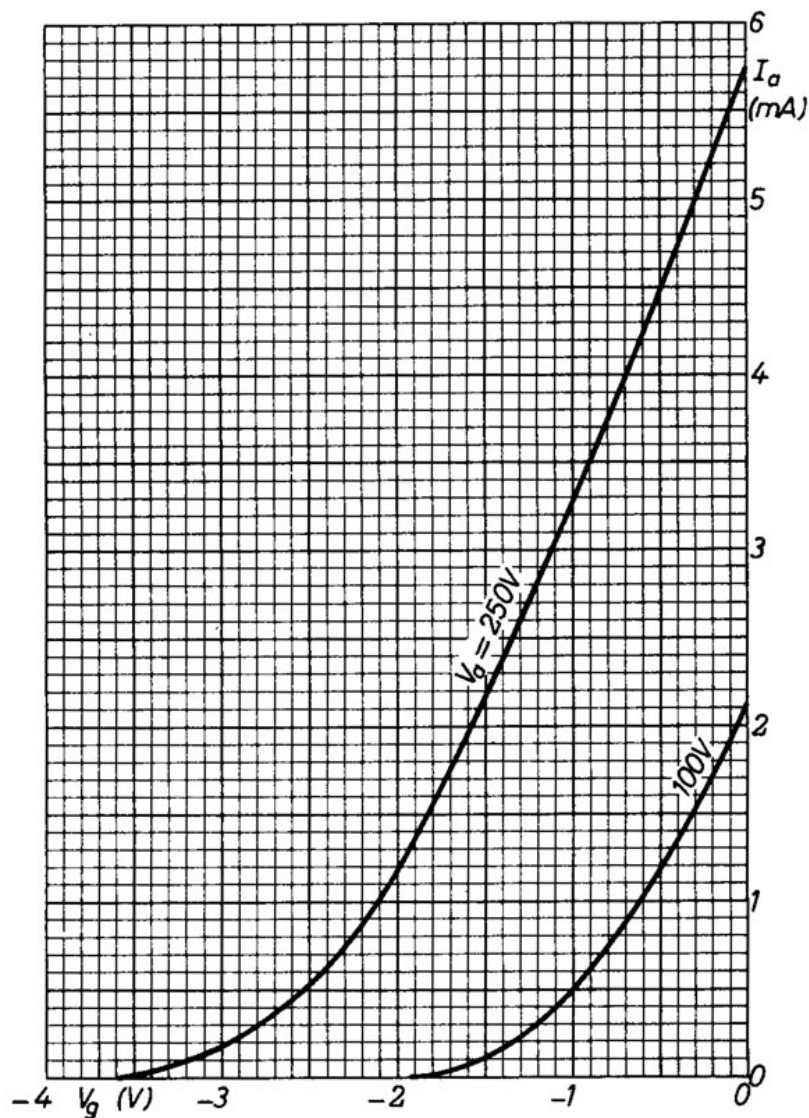
Anode voltage	V_{ao}	550	(V)
	V_a	300	
Anode dissipation	W_a	1	(W)
Cathode current	I_k	8	(mA)
Grid voltage	V_g	-50	(V)
Grid resistor (automatic bias)	R_g	2	(M Ω)
Cathode to heater voltage	V_{kf}	180	(V)
Cathode to heater circuit resistance in phase splitting circuits	R_{kf}	150	(k Ω)



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Application note:

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

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