

12AX7 Vacuum Tube

Classification– It is a nine pins tube.oxide coated cathode of indirect heated.

Application–It intended for use a NF voltage amplifier or Phase inuerter. ~~It is~~

Low noise tube.

Dimensions–Dimensions,outline diagrams of the tube and bases and the arrangement of electrode connections to the base terminals are shown in Figures 1 and 2.

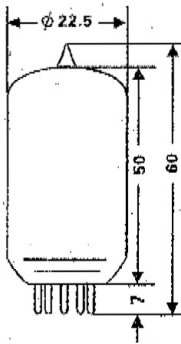


Fig.1

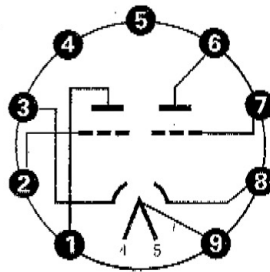


Fig.2

Nominal operating conditions and parameters

Heater voltage.....12.6V

Heater current.....0.15A

Plate voltage.....250V

Grid volage.....-2V

Plate current.....1.2mA

Plate resistance.....62.5kohms

Amplification factor.....100

Characteristics—Average characteristics

Figure 3. shown typical curves of plate currents as a function of grid voltage for several values of plate voltages

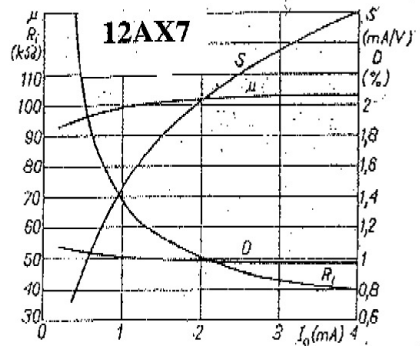
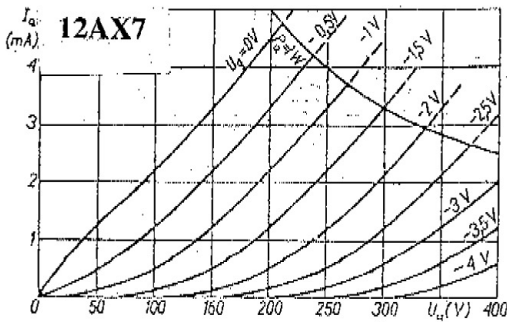
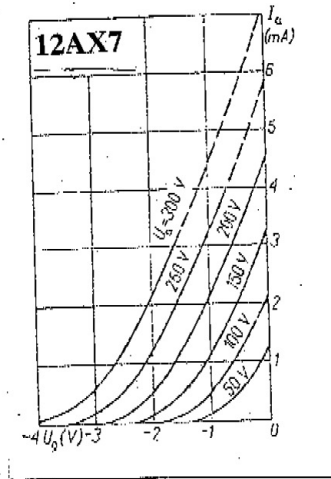


Fig.3

Limiting Operation Conditions for Safe Operation—nor simultaneous ratings

Maximum plate voltage330V

Maximum Grid voltage.....-50V

Maximum Grid voltage.....0V

Maximum Power of plate.....1.2W

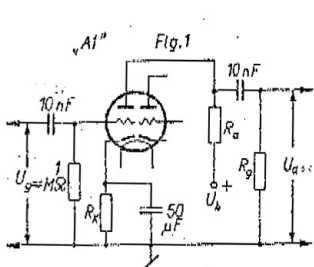


Fig. 4

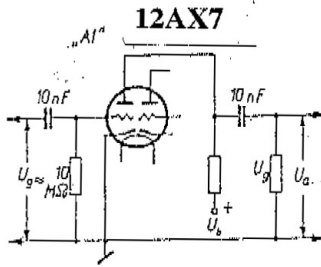


Fig. 5

U_b	R_a	R_g	R_k	I_a	$U_{a\sim}$	μ	h
V	kΩ	kΩ	kΩ	mA	V	V/V	%
200	47	150	1,5	0,86	18	34	8,5
200	100	330	1,8	0,65	20	50	4,8
200	220	680	3,3	0,36	24	56	4,6
250	47	150	1,2	1,10	23	37,5	7,0
250	100	330	1,5	0,86	26	54,5	3,9
250	220	680	2,7	0,48	28	66,5	3,4
300	47	150	1,0	1,55	26	40	5,0
300	100	330	1,2	1,11	30	57	2,7
300	220	680	2,2	0,63	36	72	2,6
350	47	150	0,82	1,98	33	42,5	4,4
350	100	330	1,0	1,4	36	61	2,2
350	220	680	1,5	0,85	37	75,5	1,6
400	47	150	0,88	2,45	37	44	3,6
400	100	330	0,82	1,72	38	63	1,7
400	220	680	1,2	1,02	38	76,5	1,1

U_b	R_a	R_g	I_a	$U_{a\sim}$	μ	h
V	kΩ	kΩ	mA	V	V/V	%
200	47	150	1,02	18	37	5,6
200	100	330	0,7	20	50	3,9
200	220	680	0,39	24	58	4,6
250	47	150	1,45	23	39	4,2
250	100	330	1,0	26	51	2,6
250	220	680	0,56	28	77	2,7
300	47	150	2,5	33	44	2,7
300	100	330	1,29	30	54	2,0
300	220	680	0,74	36	66	2,2
350	47	150	2,5	39	44	2,7
350	100	330	1,62	36	56	1,8
350	220	680	0,88	37	67	1,7
400	47	150	3,1	37	45	2,5
400	100	330	1,95	38	50	1,6
400	220	680	1,09	38	68	1,4

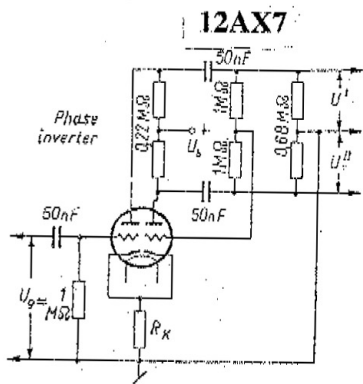


Fig. 6

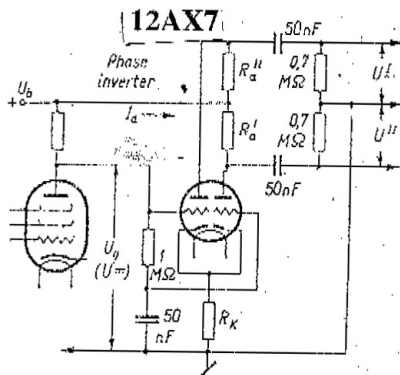


Fig. 7

U_b	R_k	I_a	$U_{a\sim}$	μ	h
V	kΩ	mA	V	V/V	%
250	1,2	1,00	35	58	5,5
350	0,82	1,7	45	62	3,5

U_b	$U_{a\sim}$	I_a	R_k	R_{aI}	R_{aII}	$U_{a\sim}$	μ	h
V	V	mA	kΩ	MΩ	MΩ	V	V/V	%
250	65	1	68	0,1	0,15	20	25	1,8
350	90	1,2	82	0,15	0,15	35	27	1,8