

# VALVES FOR HIGH FIDELITY AUDIO

TYPE	Name	GENERAL DATA				MAXIMUM RATINGS †					TYPE
		Electrical		Mechanical		Plate Volts	Grid- No. 2 Volts	Plate Dissipation Watts	Grid- No. 2 Input Watts	Peak Heater- Cathode Volts	
		Cathode Volts	Amps.	Length Inches	Diam.						
5879	Sharp-Cutoff Pentode	6.3	0.15	2 $\frac{3}{16}$	0.875	300	150	1.25	0.25	+90 -90	5879
						250	—	1.5	—	+90 -90	
6973	Beam Power Tube	6.3	0.45	3 $\frac{1}{16}$	0.875	440	330	12	2	+200▲ -200	6973
						410	—	12	1.75	+200▲ -200	
7025	High-Mu Twin Triode	6.3 12.6	0.3 0.15	2 $\frac{3}{16}$	0.875	330	—	1.2	—	+200▲ -200	7025
7027-A	Beam Power Tube	6.3	0.9	4 $\frac{1}{16}$	1.63	600	500	35	5	+200▲ -200	7027-A
						600	—	35	4.5	+200▲ -200	
7199	Medium-Mu Triode—Sharp-Cutoff Pentode	6.3	0.45	2 $\frac{3}{16}$	0.875	330	—	2.4	—	+200▲ -200	7199
						330	165	3	0.6	+200▲ -200	

SERVICE	Plate Supply Volts	Grid- No. 2 Supply Volts	TYPICAL OPERATION AND CHARACTERISTICS												TYPE
			Cathode Resistor or Grid Volts		AC Plate Resistance Ohms	Transconductance Micro-mhos	Amplification Factor	Peak AF Grid-to-Grid Volts	Plate Current Ma.	Grid- No. 2 Current Ma.	Load Resistance (Plate-to-Plate) Ohms	Total Harmonic Distortion %	Power Output Watts		
			Ohms	Volts											
Class A <sub>1</sub> Amplifier	Pentode Conn.	250	100	—	-3	2000000	1000	—	—	1.8	0.4	Grid No. 3 tied to cathode		5879	
	Triode Conn.*	100 250	— —	— —	-3 -8	17000 13700	1240 1530	21 21	— —	2.2 5.5	*Grids-No. 2 & 3 tied to plate				
Push-Pull Class AB <sub>1</sub> Amplifier	Fixed Bias	250 350 400	250 280 290	— — —	-15 -22 -25	— — —	— — —	— — —	30 44 50	105 106 107	16 14 13.7	8000 7500 8000	2 1.5 2	12.5 20 24	6973
	Cathode Bias	300 310	300 310	230 270	— —	— —	— —	— —	48 55	96 92	14 14	5500 6000	2 4	15 17	
Push-Pull Class AB <sub>1</sub> Amplifier*	Fixed Bias	375	*	—	-33.5	*Grid No. 2 of Each Tube Connected to Tap on Plate Winding of Output Transformer			67	95	—	12500	1.5	18.5	7025
	Cathode Bias	370	#	355	—				62	84	—	13000	1.2	15	
Class A <sub>1</sub> Amplifier	Each Unit	100 250	— —	— —	-1 -2	80000 62500	1250 1600	100 100	— —	0.5 1.2	Equivalent Hum & Noise Voltage (Referred to grid)= 1.8 $\mu$ volts rms, average.			7025	
Push-Pull Class AB <sub>1</sub> Amplifier	Fixed Bias	400 450 540	300 350 400	— — —	-25 -30 -38	— — —	— — —	— — —	50 60 76	152 194 220	17 19.2 21.4	6600 6000 6500	2 1.5 2	34 50 76	7027-A
	Cathode Bias	400 380 425	300 380 425	200 180 200	— — —	— — —	— — —	— — —	57 68.5 86	128 170 196	16 20 20	6600 4500 3800	2 3.5 4	32 36 44	
Push-Pull Class AB <sub>1</sub> Amplifier*	Cathode Bias	410	#	220	—	*Grid No. 2 of Each Tube Connected to Tap on Plate Winding of Output Transformer			68	155	—	8000	1.6	24	7199
Class A <sub>1</sub> Amplifier	Triode Unit	215	—	—	-8.5	8100	2100	17	—	9	Equivalent Hum & Noise Voltage (Referred to grid)		10 $\mu$ volts rms, median	7199	
	Pentode Unit	100 220	50 130	1000 62	— —	1000000 400000	1500 7000	— —	— —	1.1 12.5			35 $\mu$ volts rms, median		

## APPLICATIONS

▲ The dc component must not exceed 100 volts.

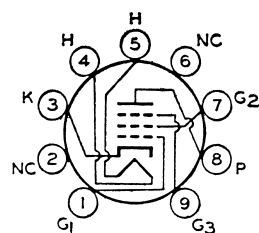
† Types 6973, 7025, 7027-A and 7199 on a Design-Maximum basis; type 5879, on a Design-Centre basis.

\* Obtained from taps on the primary winding of the output transformer. The taps are located on each side of the centre tap (B+) so as to apply 50 per cent of the plate signal voltage to grid No. 2 of each output valve.

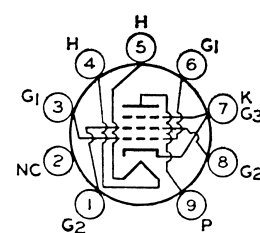
# Obtained from taps on the primary winding of the output transformer. The taps are located on each side of the centre tap (B+) so as to supply 43 per cent of the plate signal voltage to grid No. 2 of each output valve.

## Socket Connections

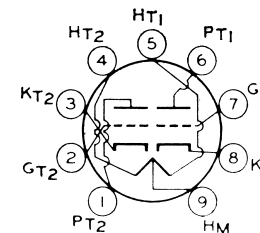
Bottom View



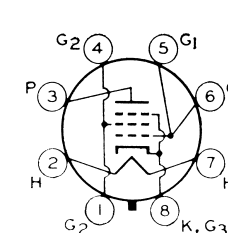
5879



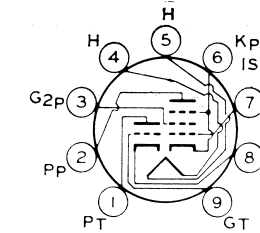
6973



7025



7027-A



7199