

TYPICAL OPERATION:

Values are for 2 valves.

Plate-Supply Voltage	410	volts.
Grid-No. 2 Supply Voltage	*	volts.
Cathode-Bias Resistor	220	ohms.
Peak A-F Grid-No. 1 to Grid-No. 1 Voltage	68	volts.
Zero-signal Cathode Current	134	mA.
Max.-signal Cathode Current	155	mA.
Effective Load Resistance (Plate to Plate)	8000	ohms.
Total Harmonic Distortion	1.6	%
Max.-signal Power Output	24	watts.

MAXIMUM CIRCUIT VALUE°:

Grid-No. 1—Circuit Resistance:

For cathode-bias operation 0.5 max. megohm

Δ The d.c. component must not exceed 100 volts.

° The type of input coupling network used should not introduce too much resistance in the Grid-No. 1 circuit. Transformer or impedance-coupling devices are recommended.

* 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 43% of the plate signal voltage to grid No. 2 of each output valve.

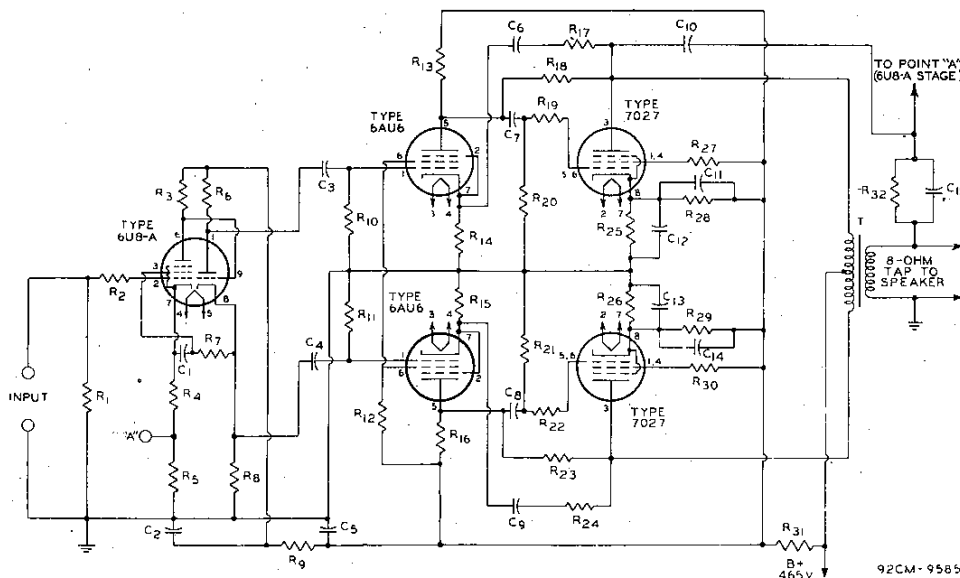


Fig. 1. High-Fidelity Amplifier Circuit Utilizing Type 7027.

C1:	20 μ F, 150 volts.
C2, C5, C11, C14:	40 μ F, 600 volts.
C3, C4:	0.1 μ F, 600 volts.
C6, C7, C8, C9:	1 μ F, 600 volts.
C10:	56 μ F, 600 volts.
C12, C13:	50 μ F, 50 volts.
C15:	120 μ F, 150 volts.
R1, R20, R21:	470000 \pm 10% ohms, $\frac{1}{2}$ watt.
R2:	10000 \pm 10% ohms, $\frac{1}{2}$ watt.
R3, R10, R11:	220000 \pm 10% ohms, $\frac{1}{2}$ watt.
R4:	820 \pm 10% ohms, $\frac{1}{2}$ watt.
R5:	10 \pm 10% ohms, $\frac{1}{2}$ watt.
R6:	15000 \pm 10% ohms, 2 watts.
R7:	180000 \pm 10% ohms, $\frac{1}{2}$ watt.
R8:	15000 \pm 10% ohms, 2 watts.
R9:	10000 \pm 10% ohms, 2 watts.
R12:	200000 \pm 10% ohms, $\frac{1}{2}$ watt.
R13, R16:	150000 \pm 10% ohms, $\frac{1}{2}$ watt.
R14, R15:	680 \pm 10% ohms, $\frac{1}{2}$ watt.

R17, R24:	120000 \pm 10% ohms, $\frac{1}{2}$ watt.
R18, R23:	330000 \pm 10% ohms, $\frac{1}{2}$ watt.
R19, R22:	10000 \pm 10% ohms, $\frac{1}{2}$ watt.
R25, R26:	425 \pm 10% ohms, 10 watts.
R27, R30:	100 \pm 10% ohms, $\frac{1}{2}$ watt.
R28, R29:	20000 \pm 10% ohms, 10 watts.
R31:	1000 \pm 10% ohms, 10 watts.
R32:	3900 \pm 10% ohms, $\frac{1}{2}$ watt.

T = Output transformer for matching impedance of voice coil to 5000-ohm plate-to-plate valve load.

Amplifier Performance Specifications:

Sensitivity = 65 millivolts for 35 watts output;

Hum and Noise = 65 db below 35 watts;

Total Harmonic Distortion = less than 0.3% at any power output level up to 38 watts.