

Mosfet-Amp: Amplifier with field-effect transistors at the output stage

by Audiokiller

<https://electroclub.info/en/developments/mosfet-amp-amplifier-with-field-effect-transistors-at-the-output/>

Location	Specifications	FootPrint	Quantity
R24, R25, R27	0.15 ohm 5W 5% sqp or other type	pin spacing 30 mm through hole	3
R26	10 ohm 2W 5% metal-film	pin spacing 17.5 mm through hole	1
R18, R23	22 ohm 0.12W 1% metal-film	through hole	2
R5, R6, R17	68 ohm 0.12W 1% metal-film	through hole	3
R3, R4, R14	120 ohm 0.12W 1% metal-film	through hole	3
R7, R19, R22	240 ohm 0.12W 1% metal-film	through hole	3
R13	330 ohm 0.12W 1% metal-film	through hole	1
R1, R8, R11	1 kohm 0.12W 1% metal-film	through hole	3
R9	1.5 kohm 0.12W 1% metal-film	through hole	1
R12, R15	4.7 kohm 0.12W 1% metal-film	through hole	2
R10	20 kohm 0.12W 1% metal-film	through hole	1
R21*	20 kohm 0.12W 1% metal-film The resistance depends on the desired output impedance of the amplifier. The resistance selection is shown in the graph below.	pin spacing 20 mm through hole	1
R2	47 kohm 0.12W 1% metal-film	through hole	1
R20	47 kohm 0.5W 1% metal-film 0.12 W is permitted	pin spacing 20 mm through hole	1
C7	33pF 50V NPO (COG) ceramic	pin spacing 5 mm	1
C3	100pF 50V NPO (COG) ceramic	pin spacing 5 mm	1
C2	1000pF 50V NPO (COG) ceramic	pin spacing 5 mm	1
C10	100nF 250V 5% Film cap MKT (polyester)	pin spacing 7.5 mm or 10 mm	1
C1	0.47μF 250V 5% MKP (polypropylene) The quality of this capacitor affects the sound	pin spacing from 5 to 22.5 mm	1
C8, C11	0.68μF 63V 5% Film cap MKT	pin spacing 5 mm, 7.5 mm or 10 mm	2
C4	220μF 25V Electrolytic aluminum non-polar (bipolar) capacitor The polar capacitor is permitted	diameter 10 mm	1
C5, C6	220μF 50V Electrolytic aluminum polar capacitor	diameter 10 mm	2
C9, C12	1000μF 50V Electrolytic aluminum polar capacitor	diameter 13 mm or 16 mm	2
R16	1 kohm Trimmer	Multi-turn	1
VT1, VT2, VT7	2N5401	TO-92 package	3
VT3, VT4, VT5, VT6	2N5551	TO-92 package	4
VT8	2SA1930 replace with	TO-220 package	1

	MJE15031 MJE15029 TTA004B with a small heat sink		
VT9	2SD669 Any inexpensive NPN transistor in a TO-126 package	TO-126 package	1
VT10	2SC5171 replace with MJE15030 MJE15028 TTC004B with a small heat sink	TO-220 package	1
VT11	IRFP240	TO-247 package	1
VT12	IRFP9240	TO-247 package	1

* The R21 resistance depends on the desired output impedance of the amplifier.

The R21 resistance selection

